

Action Memorandum Defense Reutilization Marketing Office Land Slivers

Truman Annex Naval Air Station Key West Key West, Florida

Revision No. 02

Contract No. N62470-08-D-1006 Task Order No. JM31

Submitted to:



U.S. Naval Facilities Engineering Command Southeast

Prepared by:



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August 2012

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August 16, 2012

Date

Contents

Acro	nyms and Abbreviations	iii
1.0	Purpose	1
2.0	Site Description and Background	2 4
3.0	Threats to Public Health, Welfare, or the Environment	4
4.0	Endangerment Determination	5
5.0	Selected Removal Action and Estimated Costs	6777
6.0	Expected Change in the Situation Should Action Be Delayed or Not Taken	
7.0	Outstanding Policy Issues	
8.0	Enforcement	8
9.0	Recommendation	8
10.0	References	8
Table	S	
1 2 3 4 5	North DRMO Sliver Data Summary South DRMO Sliver Data Summary BEQ Data Summary SPLP Data Summary Alternative 2: Excavation, Offsite Disposal and Backfill Removal Action Costs	

Figures

- 1 Site Location Map
- 2 Site Layout Map
- 3 Sample Locations
- 4 Soil Exceedances in DRMO North Sliver
- 5 Soil Exceedances in DRMO South Sliver
- 6 Excavation Based on Residential Criteria in DRMO North Sliver
- 7 Excavation Based on Residential Criteria in DRMO South Sliver
- 8 Excavation of S-21 Based on Residential Criteria in DRMO South Sliver

Attachments

- A Applicable or Relevant and Appropriate Requirements
- B Public Comments
- C FDEP Approval Letter

Acronyms and Abbreviations

AGVIQ-CH2M HILL AGVIQ-CH2M HILL Constructors, Inc. Joint Venture III ARAR applicable or relevant and appropriate requirement

bls below land surface

BRAC Base Realignment and Closure

CERCLA Comprehensive Environmental Response, Compensation, and

Liability Act

COC chemical of concern

DRMO Defense Reutilization Marketing Office EE/CA Engineering Evaluation/Cost Analysis EPA U.S. Environmental Protection Agency

FDEP Florida Department of Environmental Protection

ft² square feet

GRBCA global risk-based corrective action

IR Installation Restoration

LUC land use control NAS Naval Air Station

NAVFAC SE Naval Facilities Engineering Command, Southeast

NCP National Oil and Hazardous Substance Pollution Contingency Plan

NFA no further action

NPL National Priorities List

NTCRA non-time-critical removal action PAH polycyclic aromatic hydrocarbon

PCB polychlorinated biphenyl SCTL soil cleanup target level

SI Site Inspection

SPLP synthetic precipitation leaching procedure

SVOC semivolatile organic compound

TCLP Toxicity Characteristic Leaching Procedure

TtNUS Tetra Tech NUS, Inc.
UCL upper confidence level
VOC volatile organic compound

yd³ cubic yards

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Action Memorandum Defense Reutilization Marketing Office Land Slivers

1.0 Purpose

This Action Memorandum documents the proposed removal action for two slivers of land (north and south) at the former Defense Reutilization Marketing Office (DRMO), Truman Annex, Naval Air Station (NAS) Key West, Florida (Figure 1). This is a non-time-critical removal action (NTCRA) to address impacted surface and subsurface soil that has been identified through previous investigations as potentially posing a risk to human health and/or the environment. An Engineering Evaluation/Cost Analysis (EE/CA) was prepared for this removal action for the former DRMO sliver sites, and can be found in the Administrative Record. This Action Memorandum serves as the Decision Document for this removal action, and for the Navy to conduct the work proposed therein. The alternatives evaluated in the EE/CA are summarized below.

- Alternative 1: No action
- Alternative 2: Excavation, Offsite Disposal, and Backfill
- Alternative 3: Engineering Controls and Institutional Controls

This Action Memorandum was completed in accordance with the remedial program requirements defined by the Comprehensive Environmental Response, Compensation and Liability act of 1980 (CERCLA) as amended, the Superfund Amendments and Reauthorization Act of 1986, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), and the U.S. Environmental Protection Agency's (EPA) Guidance on Conducting Non-Time Critical Removal Actions Under CERCLA (EPA, 1993) and Superfund Removal Procedure Action Memorandum Guidance (EPA, 1990).

2.0 Site Description and Background

The project area consists of two slivers of land adjacent to the City-owned portion of the former DRMO at NAS Key West, Key West, Florida (Figure 1). The land slivers were also formerly part of the DRMO property but were located outside the fenced areas around the DRMO, and thus were retained by the Navy. Figure 2 presents the location of the land slivers. The former DRMO site is located on Truman Annex in Key West, Florida. The former DRMO site is approximately 6.25 acres in area and was used as a storage facility for new and used military equipment.

Over time, contaminants were released to site soils. An elevated water storage tank was formerly located at the site and was removed in 2003. This elevated tank was historically painted with lead-based paints. When the tank was demolished, lead from chipped paint was released to the surrounding soil. During a subsequent soil assessment and remediation

project, confirmation sampling identified polychlorinated biphenyls (PCBs) as an additional chemical of concern (COC) in the soil at the site. PCBs also were found in backfill material placed at the site during the 1999 interim removal action, which included a portion of the two slivers of land adjacent to the City-owned portion of the DRMO. Further delineation of the extent of PCB- and lead-contaminated soil at the site was conducted and a soil removal action was performed on the City-owned portion of the former DRMO, but not the two slivers of land owned by the Navy. This action resulted in removal of surface soil COCs to levels within the Florida Department of Environmental Protection (FDEP) soil cleanup target levels (SCTLs) protective of residential land use, as the target criteria.

The slivers of land were located outside of the fenced portion of the DRMO footprint, and therefore were not remediated during Base Realignment and Closure (BRAC) activities. The southern sliver is approximately 600 feet long by 25 feet wide; the northern sliver is approximately 200 feet long by 30 feet wide.

These slivers had levels of contaminants, specifically PCBs, polycyclic aromatic hydrocarbons (PAHs), and some inorganic compounds above the FDEP Residential and Industrial SCTLs from Chapter 62-777 of the Florida Administrative Code (2005).

2.1 Previous Investigations

The former DRMO has been investigated thoroughly in the past and remediated through soil excavations on at least four occasions. The following summarizes the historical investigations:

- Brown & Root performed a Site Inspection (SI) for the DRMO area in 1998; however, no sampling was conducted (as documented in Tetra Tech NUS, Inc. [TtNUS], 1999a).
- TtNUS performed a Supplemental SI in 1998/1999, which included setting up 100-foot by 100-foot grids (including the land slivers). Five samples per grid were composited (0 to 2 feet below land surface (bls), 2 to 5 feet bls, and 5 to 8 feet bls). Each composited sample was analyzed for semivolatile organic compounds (SVOCs) and metals. Samples were also collected and analyzed for volatile organic compounds (VOCs). The report recommended excavations be performed to remove contaminated soil across the DRMO. The Supplemental SI also included confirmation sampling in association with Bechtel Environmental, Inc.'s Fast Track Soil Removals (Bechtel Environmental, Inc., 1999), including PCB sampling (TtNUS, 1999b).
- During a removal action from January 11 to April 16, 1999, Bechtel Environmental, Inc. excavated approximately 12,000 cubic yards (yd³) of contaminated soil from the DRMO, including portions of the slivers (Bechtel Environmental, Inc., 1999).
- In June 2001, the Navy removed the existing chain link fence around the former DRMO perimeter and replaced it with an "aesthetically pleasing" fence. Prior to transfer of property to the City of Key West, the purpose of the existing fence was to keep State Parks patrons from accessing other Navy property; the original fence did not mark any property lines (except roughly the easement that the Navy gave the State Park). An aesthetically pleasing fence was built on the property line as described in the transfer documents to the City. Since the new fence did not encompass as much property as the

- original fence, several "land slivers" were created outside of the new fence area; these slivers were retained by the Navy.
- A potable water tower was removed from eastern portion of the DRMO in 2003.
 TN & Associates performed soil excavations around the former location of the water tower in 2004 to remove lead-contaminated soil associated with the lead-based paint.

 PCBs were also detected during the water tower confirmation sampling, which included the soil that was used as backfill in 1999 (TtNUS, 2005).
- In 2004, TtNUS collected additional samples around the hot spots associated with the water tower soil excavation, including the land slivers. COCs included lead, arsenic, and PCBs. The results were documented in TtNUS' Hot Spot Removal Technical Memorandum (TtNUS, 2005).
- In 2006, CH2M HILL set up 26 ¼-acre grids (100 feet by 100 feet) across the BRAC portion of the DRMO (not including the slivers) and collected approximately 10 samples per grid. The intent was to assess PCB and lead contamination. Hot spots were identified for removal based on global risk-based corrective action (GRBCA) guidance from FDEP (average for lead and 95 percent upper confidence level [UCL] for PCBs). Hot spots were also identified based on concentration at three times the FDEP Residential SCTL (CH2M HILL, 2006).
- From January 29 to February 23, 2007, CH2M HILL excavated soil from a total of 37 risk-based sample exceedance grids within the limits of the former BRAC portion of the DRMO site to 2 feet bls. Soil from seven Engineering Control areas and the three additional areas designated as "hot spots" were also excavated to meet the Residential land use standards for the upper 2 feet of soil. A total of 4,392 tons of contaminated soil was removed for disposal (CH2M HILL, 2007). In order for the BRAC portion of the DRMO to meet FDEP Residential cleanup criteria, CH2M HILL remobilized in February 2009 and excavated one remaining area with Residential SCTL exceedance along the northern DRMO boundary. The site currently meets FDEP Residential SCTLs for soil. A Site Rehabilitation Completion Report requesting unrestricted land use for soil was submitted to FDEP for the BRAC portion of the DRMO in 2010 (CH2M HILL, 2010).

In 2010 and 2011, AGVIQ-CH2M HILL Constructors, Inc. Joint Venture III (AGVIQ-CH2M HILL) collected soil samples from both the north and south DRMO slivers, and analyzed them for arsenic, lead, PAHs, and PCBs in accordance with AGVIQ-CH2M HILL's Uniform Federal Policy Sampling and Analysis Plan (AGVIQ-CH2M HILL, 2010a) and corresponding Preliminary Assessment Work Plan (AGVIQ-CH2M HILL, 2010b). Figure 3 presents the soil sample locations from these events. Samples exceeded the FDEP Residential SCTLs for arsenic, lead, PAHs, and PCBs at both slivers. PAHs were the only constituents identified as soil exceedances above the Industrial SCTLs at the north sliver, and PAH and PCB concentrations were above the Industrial SCTLs in some soil samples from the south DRMO sliver. Figures 4 and 5 present the soil exceedances at the north and south DRMO slivers, respectively. Soil samples were also analyzed for lead, PAHs, and PCBs by the Synthetic Precipitation Leaching Procedure (SPLP) for potential for soil-to-groundwater leachability. None of the SPLP results exceeded the FDEP Groundwater Cleanup Target Levels for Low Yield/Poor Quality. Tables 1 and 2 presents the benzo(a)pyrene

equivalent soil data from the north and south DRMO slivers; and Table 4 presents the SPLP data from the south DRMO sliver.

Based on the FDEP Residential SCTLs, the removal areas have been identified to reduce risk associated with surface and subsurface soil to acceptable levels. The removal areas have been defined at the north and south DRMO slivers as described below.

2.2 North DRMO Sliver

Soil represented by samples with COC concentrations in excess of the target levels should be removed or covered to prevent potential future exposure to these contaminants. Soil will be removed from two separate impacted areas at the north DRMO sliver. One area is impacted to 6 inches bls (approximately 1,327 square feet [ft²]) and a second area extends to 2 feet bls (approximately 1,301 ft²); however, the upper 6 inches of this area is not impacted in this area and can be reused as backfill. The impacted areas extend to the road to the north and to the Navy fence to the south. Figure 6 depicts the soil at the north DRMO sliver exceeding the FDEP Residential SCTLs and the proposed excavation areas; the resulting volume of soil contamination is approximately 97 yd³. Confirmation samples will be collected along the northern excavation wall and analyzed for PAHs to assess whether contamination reaches the road.

2.3 South DRMO Sliver

The vertical extent of COC contamination has been delineated for the south DRMO sliver. Soil exceeded the FDEP Residential SCTLs to a depth of 6 inches in four discrete areas encompassing approximately 1,839 ft² and to a depth of 2 feet bls in six discrete areas encompassing approximately 6,616 ft² (Figure 7). Additionally, in order to avoid land use controls (LUCs) on soil greater than 2 feet, one area will be excavated to 4 feet bls near the east end of the south DRMO sliver. Figure 8 depicts this area, which encompasses approximately 122 ft². The excavation at the south DRMO sliver will extend to the north to the aesthetically pleasing fence; the soil north of the fence currently meets FDEP Residential SCTLs as a result of past DRMO soil removal actions. The excavation proposed in this EE/CA will extend to the south to the former DRMO property line. Figures 7 and 8 depict the extent of contaminated surface and subsurface soil and the proposed excavation areas in the south DRMO sliver; the resulting volume of contaminated soil for excavation is approximately 533 yd³. Confirmation samples will be collected along the southern excavation wall and analyzed on 24-hour turnaround time for PCBs and PAHs, while lead and arsenic will be analyzed on a 72-hour turnaround time to assess whether contamination extends to the road. Because of the presence of numerous utilities in the subsurface near the road, the excavation will not extend to the road at this time.

3.0 Threats to Public Health, Welfare, or the Environment

Section 300.415 of the NCP lists the factors to be considered for determining the appropriateness of the NTCRA. Paragraphs (b)(2)(i), (ii), (iv), and (v) of Section 300.415 apply to the conditions as follows:

300.415(b)(2)(i) "Actual or potential exposures to nearby human populations, animals, or the food chain from hazardous substances or pollutants, or contaminants."

Lead in surface soil is present at concentrations that pose potential unacceptable risks to human health and/or the environment.

300.415(b)(2)(ii) "Actual or potential contamination of drinking water supplies or sensitive ecosystems."

Lead in surface soil is present at concentrations that pose potential unacceptable risks to groundwater.

300.415(b)(2)(iv) "High levels of hazardous substances or pollutants, or contaminants in soils largely at or near the surface that may migrate."

Lead in surface soil is present at concentrations that have the potential to migrate into the groundwater or adjacent surface water.

300.415(b)(2)(v) "Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released."

Since the site is located in the Florida Keys, which is surrounded by the Gulf of Mexico and the Atlantic Ocean, storms throughout the summer are often associated with strong winds and precipitation, which could cause the migration of contaminants from the site via fugitive dust or storm water runoff.

4.0 Endangerment Determination

Actual or threatened releases of pollutants and contaminants from impacted surface soil, if not addressed by implementing the response action discussed in this Action Memorandum, may present an endangerment to public health, welfare, or the environment.

5.0 Selected Removal Action and Estimated Costs

The EE/CA was completed to evaluate the removal alternatives to address the potential risks posed by impacted surface soil in preparation for site closeout under CERCLA with no further action (NFA). Through previous investigations, the site has been delineated vertically, but not horizontally near the roads. There have been no removal activities to date. The Navy is the lead agency and will perform the proposed removal action promptly and properly.

As part of the EE/CA, three alternatives were addressed for the DRMO sliver sites. These alternatives were evaluated and compared based on their effectiveness, implementability, and cost. The EE/CA describes the alternatives considered in greater detail, and the process by which the alternatives were evaluated, compared and selected.

The preferred removal action alternative described in the EE/CA is Alternative 2 – Excavation, Offsite Disposal, and Backfill. This alternative includes the excavation of impacted surface and subsurface soil up to 4 feet bls to meet FDEP Residential SCTLs, backfill of the excavations to original grade with imported uncontaminated backfill material

(topsoil), and restoration to the original condition. Confirmation samples will be collected along the road side of the excavations to establish horizontal limits.

During the removal action, specific erosion and sediment controls will be presented in a Removal Action Work Plan. These controls will include such best management practices as placing the impacted surface soil on a plastic liner, berming, and covering the soil; and installing perimeter controls as necessary to prevent offsite migration of pollutants.

Waste characterization samples will be collected for offsite disposal of contaminated soil. Waste characterization analysis consists of the toxicity characteristic (40 Code of Federal Regulations 261.24) metals, VOCs, and SVOCs using the Toxicity Characteristic Leaching Procedure (TCLP); PCBs; Target Analyte List metals; and corrosivity, reactivity, and ignitability; along with any additional testing required by the disposal facility. Waste characterization samples will be collected at the rate required by the disposal facility. Once analytical results are received, the disposal options will be selected based on the results of the waste characterization samples and the facility will be approved by the Navy prior to transport of any material. All excavated materials will be loaded into haul trucks and transported to the approved offsite facility for disposal.

Because there is no onsite borrow source, all fill material will be brought from offsite. Backfill material will consist of topsoil in the upper 6 inches. Topsoil would be a 50/50 mix of soil and sand that will support vegetation. From 6 inches to 2 feet or the bottom of the excavation areas, general backfill material will be used. Offsite backfill material will be certified uncontaminated through analytical testing of metals, VOCs, SVOCs, pesticides, and PCBs; and laboratory results will be compared to FDEP residential SCTLs. Backfill material will be compacted by running over 100 percent of the backfilled area with a track-type tractor or equivalent, and the area will be restored to match the original grade. The total volume of soil to be excavated is approximately 97 yd³ from the north DRMO sliver and 533 yd³ from the south DRMO sliver. Figures 6, 7, and 8 illustrate the limits of the excavation and restoration area for the north and south DRMO land slivers.

5.1 Contribution to Remedial Performance

The ultimate goal for the DRMO land slivers is unlimited use and unrestricted exposure. The removal action will mitigate potential risks to human health and the environment from impacted surface and subsurface soil, while satisfying project implementation and cost requirements. At the north DRMO sliver, confirmation samples will be collected along the northern excavation wall and analyzed for PAHs to assess whether contamination reaches the road. At the south DRMO sliver, confirmation samples will be collected along the southern excavation wall and analyzed on 24-hour turnaround time for PCBs and PAHs, while lead and arsenic will be collected on a 72-hour turnaround time to assess whether contamination extends to the road. Because of the presence of numerous utilities in the subsurface near the road, the excavation will not extend to the road at this time.

5.2 Applicable or Relevant and Appropriate Requirements

The NCP requires that removal actions attain federal and state applicable or relevant and appropriate requirements (ARARs) with limited exception, to the extent practicable. The analysis of the removal action alternatives for the impacted surface soil with respect to the

federal and state ARARs is presented in Attachment A of this document and also in the EE/CA. The removal action set forth in this Action Memorandum will comply with ARARs to the extent practicable.

5.3 Project Schedule

The former DRMO land slivers EE/CA was made available to the public for comment for 30 days on May 4, 2012. Although comments were received from the public, no changes to the EE/CA were necessary and the EE/CA was finalized in June 2012. The public comments and the Navy's response to comments are located in Attachment B.

The proposed project schedule for the removal action is summarized below:

- Preparation of Work Plan June 2012
- Subcontracting and Mobilization June 2012
- Removal Action July to August 2012
- Construction Completion Report October 2012

5.4 Estimated Costs

NTCRAs funded by EPA have a \$2 million and a 12-month statutory limit pursuant to Section 104(c)(1) of CERCLA. Because removal actions at NAS Key West are not funded by the EPA, these statutory limits do not generally apply. Per the Navy/Marine Corps Installation Restoration (IR) Manual, the cost or duration of the removal action is not limited.

5.5 Response Action Contract

The Navy will contract with environmental remediation contractors to perform the required work associated with the removal action of impacted surface and subsurface soil at the north and south DRMO slivers. The estimated costs are itemized in Table 5.

5.6 State and Local Authorities Role

Under Executive Order 12580, the President of the United States delegates authority to undertake CERCLA response actions to the Department of Defense. Congress further outlined this authority in the Defense Environmental Restoration Program Amendments, under 10 United States Code Sections 2701 through 2705. CERCLA Section 120 requires the Navy to apply state removal and remedial action law requirements at all of its facilities.

Although EPA found that NAS Key West did not qualify for the CERCLA National Priorities List (NPL), the Navy conducts remediation activities at NAS Key West, including this site, in accordance with CERCLA. Therefore, AGVIQ-CH2M HILL has prepared this Action Memorandum.

Because NAS Key West is not on the NPL, the FDEP is the lead regulatory agency that the Navy works with regarding remedial activities at NAS Key West. The Navy will continue to be the lead agency and the Navy's IR program will continue to be the exclusive source of funding for remedial actions at NAS Key West property. The Navy will continue to work with FDEP until actions addressing the impacted surface soil are complete.

6.0 Expected Change in the Situation Should Action Be Delayed or Not Taken

If no action is taken or the action is delayed, the potential for direct contact with the contaminants and the threat of migration of contaminants from the site will remain.

7.0 Outstanding Policy Issues

There are no outstanding policy issues regarding this action.

8.0 Enforcement

The Navy can and will perform the proposed response promptly and properly.

9.0 Recommendation

This Action Memorandum presents the selected removal action for the impacted surface and subsurface soil at the north and south DRMO slivers that was developed in accordance with CERCLA as amended, and consistent with the NCP. This decision is based on the Administrative Record file for NAS Key West, DRMO land slivers.

Conditions at the site meet the NCP section 300.415(b)(2) criteria for removal action. The Naval Facilities Engineering Command, Southeast (NAVFAC SE) in cooperation with the FDEP, recommends approval of the proposed remedial action. If approved, the total project ceiling will be \$295,164. Response actions should commence as soon as practical because of the potential threat to human health and/or the environment. The FDEP approval letter is located in Attachment C.

10.0 References

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Tables

TABLE 1 North DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location					N-S	S-01		N-SS-02		N-SB-02	N-S	S-03
Sample ID	1				N-SS-01-(000.5)-111710	N-SS-01-(0.502)-111710	N-SS-02-(000.5)-111710	JM31-N-FD3-111710	N-SS-02-(0.502)-111710	N-SB-02-(0204)-111710	N-SS-03-(000.5)-111710	N-SS-03-(0.502)-111710
Sample Depth (ft)	1				0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	0 - 0.5	0.5 - 2
Sample Date	1				11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND								
,												
PAH (MG/KG)												
1-Methylnaphthalene	MG/KG	31	200	1800	0.01 J	0.012 U	0.018	0.023 J	0.009 U	0.0091 U	0.0086 U	0.0088 U
2-Methylnaphthalene	MG/KG	85	210	2100	0.0066 J	0.011 U	0.0086 U	0.0086 U	0.005 J	0.0087 U	0.0082 U	0.0084 U
Acenaphthene	MG/KG	21	2400	20000	0.008 J	0.009 U	0.0068 U	0.015 J	0.0068 U	0.0069 U	0.0065 U	0.0066 U
Acenaphthylene	MG/KG	270	1800	20000	0.011 U	0.011 U	0.0084 U	0.0098 J	0.0084 U	0.0085 U	0.008 U	0.0082 U
Anthracene	MG/KG	25000	21000	300000	0.015	0.011 U	0.0046 J	0.076 J	0.0086 U	0.0087 U	0.0082 U	0.0084 U
Benzo(a)anthracene	MG/KG	8			0.086	0.014	0.033	0.63 J	0.065 J	0.0078 U	0.004 J	0.0075 U
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.069	0.014	0.047	0.48 J	0.28 J	0.0092 J	0.0072 J	0.0082 U
Benzo(b)fluoranthene	MG/KG	24			0.1	0.021	0.043	0.44 J	0.3 J	0.01 J	0.0097 J	0.0058 U
Benzo(g,h,i)perylene	MG/KG	320000	2500	52000	0.068	0.012 J	0.06	0.39 J	0.32	0.026	0.012	0.0071 U
Benzo(k)fluoranthene	MG/KG	240			0.037	0.0069 J	0.025	0.25 J	0.13 J	0.0071 U	0.005 J	0.0069 U
Chrysene	MG/KG	770			0.11	0.021	0.05	0.67 J	0.15 J	0.0054 J	0.0095 J	0.0054 U
Dibenz(a,h)anthracene	MG/KG	7			0.014	0.0096 U	0.0073 U	0.0073 U	0.0073 U	0.0074 U	0.0069 U	0.0071 U
Fluoranthene	MG/KG	12000	3200	59000	0.3	0.05	0.086	1.2 J	0.094 J	0.0052 J	0.017	0.025
Fluorene	MG/KG	1600	2600	33000	0.011 J	0.0084 U	0.0064 U	0.0064 U	0.011 J	0.0065 U	0.0061 U	0.0062 U
Indeno(1,2,3-cd)pyrene	MG/KG	66			0.05	0.0091 J	0.041	0.24 J	0.19	0.012	0.0066 J	0.0069 U
Naphthalene	MG/KG	12	55	300	0.0075 U	0.0075 U	0.0057 U	0.0057 U	0.011 J	0.0058 U	0.0055 U	0.0056 U
Phenanthrene	MG/KG	2500	2200	36000	0.094	0.011 J	0.021	0.29 J	0.0073 U	0.0074 U	0.0069 U	0.0071 U
Pyrene	MG/KG	8800	2400	45000	0.16	0.027	0.057	1.1 J	0.055 J	0.0067 U	0.011	0.0041 J
SW6020 (MG/KG)												
Arsenic	MG/KG		2.1	12	2.9 J	0.44 U	0.54 U	0.52 U	0.51 U	NA	0.41 B	0.28 U
Lead	MG/KG		400	1400	93.7	62.3	16.1	7	6.8	NA	1.3	0.78
SW8082 (MG/KG)												
Aroclor-1016	MG/KG	170	0.5	2.6	0.023 U	0.023 U	0.023 U	0.023 U	0.023 U	NA	0.022 U	0.022 U
Aroclor-1221	MG/KG	170	0.5	2.6	0.021 U	0.021 U	0.021 U	0.021 U	0.021 U	NA	0.02 U	0.02 U
Aroclor-1232	MG/KG	170	0.5	2.6	0.035 U	0.035 U	0.035 U	0.035 U	0.036 U	NA	0.033 U	0.034 U
Aroclor-1242	MG/KG	170	0.5	2.6	0.019 U	0.019 U	0.019 U	0.019 U	0.02 U	NA	0.018 U	0.019 U
Aroclor-1248	MG/KG	170	0.5	2.6	0.019 U	0.019 U	0.019 U	0.019 U	0.02 U	NA	0.018 U	0.019 U
Aroclor-1254	MG/KG	170	0.5	2.6	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	NA	0.016 U	0.016 U
Aroclor-1260	MG/KG	170	0.5	2.6	0.63	0.042	0.14	0.011 U	0.011 U	NA	0.01 U	0.01 U

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg
- SCTL ^{1 RES} Soil Cleanup Target Level Residential.
- **SCTL** ^{1 IND} Soil Cleanup Target Level Industrial.
- SCTL LGW^{1LY/PQ} Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the $\,$ SCTL $^{\rm 1RES}$

Values Shaded Grey are hits that exceed the SCTL 1IND

Values Bolded and Shaded Green are hits exceeding the **SCTL LGW**^{1LY/PQ}

Values Bold and Shaded Grey are hits that exceed both SCTL ^{1RES,} SCTL LGW^{1LY/PQ} and SCTL ^{1IND}

TABLE 1 North DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location						N-SS-04		N-S	S-05	N-SB-05	N-SS-06	N-SS-07	N-SS-08	N-SS-09	N-SS-10
Sample ID					JM31-N-FD2-111710	N-SS-04-(000.5)-111710	N-SS-04-(0.502)-111710	N-SS-05-(000.5)-111710	N-SS-05-(0.502)-111710	N-SB-05-(0204)-111710	N-SS-06-0.502	N-SS-07-0.502	N-SS-08-000.5	N-SS-09-000.5	N-SS-10-0.502
Sample Depth (ft)					0 - 0.5	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	2 - 4	0.5 - 2	0.5 - 2	0 - 0.5	0 - 0.5	0.5 - 2
Sample Date					11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND											
PAH (MG/KG)															
1-Methylnaphthalene	MG/KG	31	200	1800	0.069 J	0.01 U	0.0092 U	0.0092 U	0.0091 U	0.0092 U	0.007 U	0.0068 U	0.036	0.48 J	0.0053 J
2-Methylnaphthalene	MG/KG	85	210	2100	0.0086 U	0.0097 U	0.0032 U	0.0032 U	0.0087 U	0.0088 U	0.0067 U	0.0064 U	0.0065 U	0.012 J	0.0066 U
Acenaphthene	MG/KG	21	2400	20000	0.13 J	0.0077 U	0.007 U	0.005 J	0.0069 U	0.007 U	0.0053 U	0.0051 U	0.003 J	0.018 J	0.0053 U
Acenaphthylene	MG/KG	270	1800	20000	0.0084 U	0.0094 U	0.0085 U	0.0085 U	0.0085 U	0.0086 U	0.0065 U	0.0041 J	0.0063 U	0.043 J	0.0065 U
Anthracene	MG/KG	25000	21000	300000	0.053 J	0.033 J	0.0087 U	0.0056 J	0.0096 J	0.0088 U	0.0067 U	0.0064 U	0.0065 U	0.042 J	0.0066 U
Benzo(a)anthracene	MG/KG	8			0.99 J	0.034 J	0.039	0.043	0.066	0.018	0.006 U	0.03	0.085	1.6 J	0.019
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.71 J	0.21 J	0.057	0.069	0.08	0.031	0.0086	0.11	0.093	1 J	0.031
Benzo(b)fluoranthene	MG/KG	24			0.99 J	0.18 J	0.052	0.066	0.077	0.026	0.011	0.14	0.098	1.7 J	0.034
Benzo(g,h,i)perylene	MG/KG	320000	2500	52000	0.61 J	0.2 J	0.065	0.089	0.096	0.039	0.013	0.16	0.1	0.79 J	0.039
Benzo(k)fluoranthene	MG/KG	240			0.4 J	0.092 J	0.028	0.028	0.032	0.013	0.0036 J	0.045	0.041	0.53 J	0.015
Chrysene	MG/KG	770			1.2 J	0.33 J	0.057	0.076	0.085	0.026	0.0038 J	0.078	0.11	2.2 J	0.028
Dibenz(a,h)anthracene	MG/KG	7			0.0073 U	0.0082 U	0.0074 U	0.0074 U	0.0073 U	0.0074 U	0.0057 U	0.011	0.0055 U	0.066 J	0.0056 U
Fluoranthene	MG/KG	12000	3200	59000	3.8 J	0.037 J	0.057	0.19	0.15	0.047	0.012	0.06	0.19	3.9 J	0.026
Fluorene	MG/KG	1600	2600	33000	0.14 J	0.56 J	0.0065 U	0.0033 J	0.0064 U	0.0065 U	0.005 U	0.0052 J	0.018	0.091 J	0.0049 U
Indeno(1,2,3-cd)pyrene	MG/KG	66			0.38 J	0.12 J	0.04	0.054	0.061	0.026	0.0086	0.086	0.088	0.56 J	0.024
Naphthalene	MG/KG	12	55	300	0.0057 U	0.0064 U	0.0081 J	0.0058 U	0.0058 U	0.0058 U	0.0027 J	0.0066 J	0.032	0.24 J	0.0089
Phenanthrene	MG/KG	2500	2200	36000	1.7 J	0.0082 U	0.0077 J	0.045	0.055	0.018	0.0057 U	0.0046 J	0.054	0.2 J	0.008 J
Pyrene	MG/KG	8800	2400	45000	2.7 J	0.0074 U	0.04	0.079	0.11	0.035	0.0052 J	0.037	0.15	3.2 J	0.019
SW6020 (MG/KG)															
Arsenic	MG/KG		2.1	12	0.41 U	0.33 U	0.44 U	0.86	0.88	NA	NA	NA	NA	NA	NA
Lead	MG/KG		400	1400	36 J	75.7 J	2.1	66.7	84.5	NA	NA	NA	NA	NA	NA
SW8082 (MG/KG)															
Aroclor-1016	MG/KG	170	0.5	2.6	0.022 U	0.025 U	0.023 U	0.023 U	0.023 U	NA	NA	NA	NA	NA	NA
Aroclor-1221	MG/KG	170	0.5	2.6	0.021 U	0.023 U	0.022 U	0.021 U	0.021 U	NA	NA	NA	NA	NA	NA
Aroclor-1232	MG/KG	170	0.5	2.6	0.035 U	0.039 U	0.036 U	0.036 U	0.036 U	NA	NA	NA	NA	NA	NA
Aroclor-1242	MG/KG	170	0.5	2.6	0.019 U	0.021 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA
Aroclor-1248	MG/KG	170	0.5	2.6	0.019 U	0.021 U	0.02 U	0.02 U	0.02 U	NA	NA	NA	NA	NA	NA
Aroclor-1254	MG/KG	170	0.5	2.6	0.016 U	0.018 U	0.017 U	0.017 U	0.017 U	NA	NA	NA	NA	NA	NA
Aroclor-1260	MG/KG	170	0.5	2.6	0.99 J	0.17 J	0.011 U	0.33	0.011 U	NA	NA	NA	NA	NA	NA

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- $\label{thm:continuity} \textbf{UJ} \ \ \textbf{The analyte was below the reported sample quantitation limit.} \ \ \textbf{However, the reported value is approximate.}$

mg/kg Milligrams per Kilogram

1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL ^{1 RES} - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL 1RES

Values Shaded Grey are hits that exceed the SCTL 1IND

Values Bolded and Shaded Green are hits exceeding the **SCTL LGW**^{1LY/PQ}

Values Bold and Shaded Grey are hits that exceed both SCTL ^{1RES,} SCTL LGW^{1LY/PQ} and SCTL ^{1IND}

TABLE 2 South DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location					S-S	S-06	S-SS	S-07	S-SB-07	S-SS	5-08		S-SS-09	
Sample ID					S-SS-06-(000.5)-111710	S-SS-06-(0.502)-111710	S-SS-07-(000.5)-111710	S-SS-07-(0.502)-111710	S-SB-07-(0204)-111710	S-SS-08-(000.5)-111710	S-SS-08-(0.502)-111710	JM31-S-FD4-111710	S-SS-09-(000.5)-111710	S-SS-09-(0.502)-111710
Sample Depth (ft)					0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	2 - 4	0 - 0.5	0.5 - 2	0 - 0.5	0 - 0.5	0.5 - 2
Sample Date					11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND										
PAH (MG/KG)														
1-Methylnaphthalene	MG/KG	31	200	1800	0.0092 UJ	0.0093 UJ	0.013	0.0085 J	0.011	0.037 J	0.0091 U	0.0085 U	0.0085 U	0.0084 U
2-Methylnaphthalene	MG/KG	85	210	2100	0.0087 UJ	0.0088 UJ	0.0086 U	0.0085 U	0.012	0.014 J	0.0086 U	0.008 U	0.0081 U	0.011
Acenaphthene	MG/KG	21	2400	20000	0.0069 UJ	0.007 UJ	0.0042 J	0.0036 J	0.0059 U	0.042 J	0.0069 U	0.0064 U	0.0064 U	0.0064 U
Acenaphthylene	MG/KG	270	1800	20000	0.0085 UJ	0.0086 UJ	0.0052 J	0.0083 U	0.0047 J	0.016 J	0.0084 U	0.009 J	0.0079 U	0.0078 U
Anthracene	MG/KG	25000	21000	300000	0.0087 UJ	0.0088 UJ	0.019	0.013	0.0091 J	0.072 J	0.0086 U	0.008 U	0.0081 U	0.008 U
Benzo(a)anthracene	MG/KG	8			0.05 J	0.0079 UJ	0.21	0.1	0.06	0.4 J	0.038	0.032	0.024	0.0064 J
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.12 J	0.0086 UJ	0.17	0.14	0.043	0.57 J	0.048	0.052	0.05	0.012
Benzo(b)fluoranthene	MG/KG	24			0.17 J	0.0061 UJ	0.14	0.1	0.049	0.39 J	0.041	0.043	0.044	0.016
Benzo(g,h,i)perylene	MG/KG	320000	2500	52000	0.0074 UJ	0.055 J	0.16	0.17	0.034	0.72 J	0.098	0.075	0.072	0.03
Benzo(k)fluoranthene	MG/KG	240			0.046 J	0.0073 UJ	0.074	0.051	0.019	0.22 J	0.023	0.02	0.019	0.0051 J
Chrysene	MG/KG	770			0.13 J	0.0057 UJ	0.25	0.14	0.076	0.62 J	0.06	0.051	0.049	0.01
Dibenz(a,h)anthracene	MG/KG	7			0.0074 UJ	0.0075 UJ	0.0073 U	0.0072 U	0.0063 U	0.0072 U	0.0073 U	0.0068 U	0.0069 U	0.0068 U
Fluoranthene	MG/KG	12000	3200	59000	0.24 J	0.0069 J	0.36	0.24	0.14	1 J	0.13	0.075	0.072	0.018
Fluorene	MG/KG	1600	2600	33000	0.016 J	0.0066 UJ	0.019	0.015	0.021	0.091 J	0.0064 U	0.0049 J	0.0042 J	0.006 U
Indeno(1,2,3-cd)pyrene	MG/KG	66			0.0072 UJ	0.0073 UJ	0.098	0.094	0.024	0.43 J	0.035	0.041	0.038	0.011
Naphthalene	MG/KG	12	55	300	0.0058 UJ	0.0059 UJ	0.0057 U	0.0057 U	0.015	0.0057 U	0.023	0.0054 U	0.0054 U	0.0053 U
Phenanthrene	MG/KG	2500	2200	36000	0.032 J	0.0038 J	0.1	0.065	0.052	0.28 J	0.027	0.012	0.011	0.0068 U
Pyrene	MG/KG	8800	2400	45000	0.18 J	0.0074 J	0.33	0.16	0.11	0.69 J	0.061	0.052	0.046	0.011
SW6020 (MG/KG)														
Arsenic	MG/KG		2.1	12	0.42 U	0.36 U	0.44 J	0.61	NA	0.46 U	0.28 J	0.47	0.34 U	0.44 U
Lead	MG/KG		400	1400	6.4	8.7	116	186	NA	179	37.3	25 J	9 J	2.1
SW8082 (MG/KG)														
Aroclor-1016	MG/KG	170	0.5	2.6	0.023 U	0.024 U	0.023 U	0.023 U	NA	0.022 U	0.023 U	0.022 U	0.022 U	0.022 U
Aroclor-1221	MG/KG	170	0.5	2.6	0.021 U	0.022 U	0.021 U	0.021 U	NA	0.021 U	0.021 U	0.02 U	0.02 U	0.02 U
Aroclor-1232	MG/KG	170	0.5	2.6	0.035 U	0.037 U	0.035 U	0.035 U	NA	0.034 U	0.036 U	0.033 U	0.034 U	0.033 U
Aroclor-1242	MG/KG	170	0.5	2.6	0.019 U	0.02 U	0.019 U	0.019 U	NA	0.019 U	0.02 U	0.018 U	0.018 U	0.018 U
Aroclor-1248	MG/KG	170	0.5	2.6	0.019 U	0.02 U	0.019 U	0.019 U	NA	0.019 U	0.02 U	0.018 U	0.018 U	0.018 U
Aroclor-1254	MG/KG	170	0.5	2.6	0.017 U	0.017 U	0.017 U	0.016 U	NA	0.016 U	0.017 U	0.016 U	0.016 U	0.016 U
Aroclor-1260	MG/KG	170	0.5	2.6	0.82	0.011 U	0.44	0.48 J	NA	3 J	0.2	0.1	0.11	0.028

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL ^{1 RES} - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the **SCTL** ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL 1RES

Values Shaded Grey are hits that exceed the SCTL 1IND

TABLE 2 South DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location					S-SS	5-10	S-SB-10	S-SS	5-11		S-SS-12		S-SB-12
Sample ID					S-SS-10-(000.5)-111710	S-SS-10-(0.502)-111710	S-SB-10-(0204)-111710	S-SS-11-(000.5)-111710	S-SS-11-(0.502)-111710	S-SS-12-(000.5)-111710	JM31-S-FD5-111710	S-SS-12-(0.502)-111710	S-SB-12-(0204)-111710
Sample Depth (ft)					0 - 0.5	0.5 - 2	2 - 4	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4
Sample Date					11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND									
PAH (MG/KG)													
1-Methylnaphthalene	MG/KG	31	200	1800	0.0091 U	0.0094 U	0.0076 U	0.0087 U	0.0088 U	0.019	0.0068 J	0.0091 U	NA
2-Methylnaphthalene	MG/KG	85	210	2100	0.0087 U	0.0046 J	0.0072 U	0.0083 U	0.0084 U	0.0089 U	0.0088 UJ	0.0086 U	NA
Acenaphthene	MG/KG	21	2400	20000	0.0068 J	0.0071 U	0.0057 U	0.0066 U	0.0067 U	0.007 U	0.007 UJ	0.0069 U	NA
Acenaphthylene	MG/KG	270	1800	20000	0.0052 J	0.0087 U	0.007 U	0.0081 U	0.0082 U	0.0086 U	0.0085 UJ	0.0084 U	NA
Anthracene	MG/KG	25000	21000	300000	0.021	0.012	0.0072 U	0.0083 U	0.0084 U	0.037	0.016 J	0.0086 U	NA
Benzo(a)anthracene	MG/KG	8			0.14	0.09	0.014	0.0071 J	0.0052 J	0.18	0.1 J	0.021 J	NA
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.2	0.14	0.04	0.011	0.013	0.085	0.2 J	0.024 J	NA
Benzo(b)fluoranthene	MG/KG	24			0.15	0.094	0.034	0.01 J	0.015	0.12	0.19 J	0.028 J	NA
Benzo(g,h,i)perylene	MG/KG	320000	2500	52000	0.3	0.26	0.07	0.016	0.019	0.045	0.16 J	0.025 J	NA
Benzo(k)fluoranthene	MG/KG	240			0.08	0.053	0.014	0.0049 J	0.0047 J	0.048	0.087 J	0.009 J	NA
Chrysene	MG/KG	770			0.2	0.13	0.03	0.011	0.01 J	0.2	0.2 J	0.037 J	NA
Dibenz(a,h)anthracene	MG/KG	7			0.0073 U	0.0076 U	0.0061 U	0.007 U	0.0071 U	0.0075 U	0.0074 UJ	0.0073 U	NA
Fluoranthene	MG/KG	12000	3200	59000	0.33	0.23	0.032	0.021	0.011	0.56	0.3 J	0.053 J	NA
Fluorene	MG/KG	1600	2600	33000	0.028	0.025	0.0054 U	0.0062 U	0.0062 U	0.032	0.021 J	0.0036 J	NA
Indeno(1,2,3-cd)pyrene	MG/KG	66			0.15	0.11	0.034	0.0091 J	0.013	0.031	0.14 J	0.017 J	NA
Naphthalene	MG/KG	12	55	300	0.047	0.006 U	0.0048 U	0.0055 U	0.0056 U	0.0059 U	0.0058 UJ	0.0058 U	NA
Phenanthrene	MG/KG	2500	2200	36000	0.083	0.035	0.0078 J	0.0094 J	0.0071 U	0.19	0.075 J	0.01 J	NA
Pyrene	MG/KG	8800	2400	45000	0.22	0.13	0.021	0.014	0.0088 J	0.36	0.2 J	0.028 J	NA
SW6020 (MG/KG)													
Arsenic	MG/KG		2.1	12	0.53 U	0.83	NA	0.48 U	0.5 U	0.37	0.81 J	0.48 U	NA
Lead	MG/KG		400	1400	132	118	NA	6.7	7.9	110	143	117	NA
SW8082 (MG/KG)													
Aroclor-1016	MG/KG	170	0.5	2.6	0.023 U	0.024 U	0.024 U	0.022 U	0.022 U	0.023 U	0.024 U	0.023 UJ	0.025 U
Aroclor-1221	MG/KG	170	0.5	2.6	0.021 U	0.022 U	0.022 U	0.02 U	0.02 U	0.021 U	0.022 U	0.021 UJ	0.023 U
Aroclor-1232	MG/KG	170	0.5	2.6	0.036 U	0.037 U	0.036 U	0.034 U	0.034 U	0.036 U	0.036 U	0.035 UJ	0.039 U
Aroclor-1242	MG/KG	170	0.5	2.6	0.02 U	0.02 U	0.02 U	0.019 U	0.019 U	0.02 U	0.02 U	0.019 UJ	0.021 U
Aroclor-1248	MG/KG	170	0.5	2.6	0.02 U	0.02 U	0.02 U	0.019 U	0.25 J	0.02 U	0.02 U	0.019 UJ	0.021 U
Aroclor-1254	MG/KG	170	0.5	2.6	0.017 U	0.017 U	0.017 U	0.016 U	0.016 U	0.017 U	0.017 U	0.017 UJ	0.018 U
Aroclor-1260	MG/KG	170	0.5	2.6	1.5 J	1.2	0.037	0.01 U	0.01 U	2.8 J	3.4	3.2	0.067

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 RES - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL 1RES

Values Shaded Grey are hits that exceed the SCTL 1IND

TABLE 2 South DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location					S-SS	5-13		S-SS-14		S-SB-14	S-SS	S-15	S-SB-15
Sample ID					S-SS-13-(000.5)-111710	S-SS-13-(0.502)-111710	JM31-S-FD6-111710	S-SS-14-(000.5)-111710	S-SS-14-(0.502)-111710	S-SB-14-(0204)-111710	S-SS-15-(000.5)-111710	S-SS-15-(0.502)-111710	S-SB-15-(0204)-111710
Sample Depth (ft)					0 - 0.5	0.5 - 2	0 - 0.5	0 - 0.5	0.5 - 2	2 - 4	0 - 0.5	0.5 - 2	2 - 4
Sample Date					11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND									
PAH (MG/KG)													
1-Methylnaphthalene	MG/KG	31	200	1800	0.0084 U	0.0083 U	0.02	0.023	0.01 J	0.0074 U	0.0061 J	0.0095 U	0.014
2-Methylnaphthalene	MG/KG	85	210	2100	0.008 U	0.0079 U	0.016 J	0.031 J	0.008 J	0.0071 U	0.0086 U	0.0053 J	0.016
Acenaphthene	MG/KG	21	2400	20000	0.0063 U	0.0063 U	0.0072 U	0.0071 U	0.0073 U	0.0056 U	0.0068 U	0.0072 U	0.0059 U
Acenaphthylene	MG/KG	270	1800	20000	0.0078 U	0.0077 U	0.0049 J	0.0048 J	0.0089 U	0.0069 U	0.0084 U	0.0088 U	0.0073 U
Anthracene	MG/KG	25000	21000	300000	0.008 U	0.0079 U	0.017 J	0.03 J	0.0078 J	0.0071 U	0.0086 U	0.009 U	0.0075 U
Benzo(a)anthracene	MG/KG	8			0.0078 J	0.0071 U	0.18	0.23	0.07	0.011	0.023	0.011 J	0.014
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.016	0.0077 U	0.18 J	0.33 J	0.14	0.025	0.055	0.12	0.082
Benzo(b)fluoranthene	MG/KG	24			0.017	0.0055 U	0.17	0.23	0.079	0.024	0.11	0.093	0.059
Benzo(g,h,i)perylene	MG/KG	320000	2500	52000	0.027	0.0067 U	0.17 J	0.35 J	0.12	0.04	0.0073 U	0.18	0.15
Benzo(k)fluoranthene	MG/KG	240			0.007 J	0.0065 U	0.077 J	0.17 J	0.055	0.0098	0.027	0.052	0.018
Chrysene	MG/KG	770			0.015	0.005 U	0.26 J	0.38 J	0.18	0.022	0.11	0.048	0.028
Dibenz(a,h)anthracene	MG/KG	7			0.0067 U	0.0067 U	0.0077 U	0.0076 U	0.0077 U	0.006 U	0.0073 U	0.0077 U	0.0063 U
Fluoranthene	MG/KG	12000	3200	59000	0.027	0.0079 U	0.52	0.67	0.28	0.043	0.12	0.056	0.028
Fluorene	MG/KG	1600	2600	33000	0.0059 U	0.0059 U	0.0068 U	0.056 J	0.024	0.0053 U	0.012	0.0067 U	0.0056 U
Indeno(1,2,3-cd)pyrene	MG/KG	66			0.018	0.0065 U	0.11 J	0.22 J	0.092	0.022	0.047	0.1	0.075
Naphthalene	MG/KG	12	55	300	0.01	0.0053 U	0.0061 U	0.006 U	0.0061 U	0.0047 U	0.0057 U	0.006 U	0.012
Phenanthrene	MG/KG	2500	2200	36000	0.0067 U	0.0067 U	0.11 J	0.18 J	0.066	0.015	0.0083 J	0.0057 J	0.0068 J
Pyrene	MG/KG	8800	2400	45000	0.02	0.0061 U	0.28	0.37	0.15	0.026	0.038	0.024	0.011
SW6020 (MG/KG)													
Arsenic	MG/KG		2.1	12	0.41 J	0.44	0.4 U	0.43 J	0.69	NA	0.56	0.29 U	NA
Lead	MG/KG		400	1400	13.1	0.86	432	430	272	NA	98	19.8	NA
SW8082 (MG/KG)													
	MG/KG	170	0.5	2.6	0.021 U	0.022 U	0.025 U	0.024 U	0.024 UJ	0.023 U	0.022 U	0.024 U	NA
	MG/KG	170	0.5	2.6	0.02 U	0.02 U	0.023 U	0.023 U	0.022 UJ	0.021 U	0.021 U	0.022 U	NA
	MG/KG	170	0.5	2.6	0.033 U	0.033 U	0.038 U	0.038 U	0.037 UJ	0.036 U	0.034 U	0.037 U	NA
Aroclor-1242	MG/KG	170	0.5	2.6	0.018 U	0.018 U	0.021 U	0.021 U	0.02 UJ	0.02 U	0.019 U	0.02 U	NA
Aroclor-1248	MG/KG	170	0.5	2.6	0.018 U	0.018 U	0.021 U	0.021 U	0.02 UJ	0.02 U	0.019 U	0.02 U	NA
	MG/KG	170	0.5	2.6	0.016 U	0.016 U	0.018 U	0.018 U	0.018 UJ	0.017 U	0.016 U	0.018 U	NA
Aroclor-1260	MG/KG	170	0.5	2.6	0.061	0.01 U	12 J	14	2.6	0.31	1.3	0.025 J	NA

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 RES - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL 1RES

Values Shaded Grey are hits that exceed the SCTL 1IND

TABLE 2 South DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location					S-SS	5-16		S-SS-17		S-SB-17	S-S:	S-18	S-SB-18
Sample ID					S-SS-16-(000.5)-111710	S-SS-16-(0.502)-111710	S-SS-17-(000.5)-111710	JM31-S-FD7-111710	S-SS-17-(0.502)-111710	S-SB-17-(0204)-111710	S-SS-18-(000.5)-111710	S-SS-18-(0.502)-111710	S-SB-18-(0204)-111710
Sample Depth (ft)					0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0.5 - 2	2 - 4	0 - 0.5	0.5 - 2	2 - 4
Sample Date					11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND									
PAH (MG/KG)													
1-Methylnaphthalene	MG/KG	31	200	1800	0.036	0.0095 U	0.028	0.015 J	0.0094 U	0.017	0.0068 J	0.0094 U	0.011 U
2-Methylnaphthalene	MG/KG	85	210	2100	0.02	0.009 U	0.0092 U	0.016 J	0.0051 J	0.019	0.0088 U	0.009 U	0.01 U
Acenaphthene	MG/KG	21	2400	20000	0.053	0.0072 U	0.029	0.0038 J	0.0071 U	0.0061 U	0.0099 J	0.0071 U	0.008 U
Acenaphthylene	MG/KG	270	1800	20000	0.0089 U	0.0088 U	0.009 U	0.009 U	0.0087 U	0.0062 J	0.0086 U	0.0088 U	0.0099 U
Anthracene	MG/KG	25000	21000	300000	0.082	0.009 U	0.038	0.007 J	0.0053 J	0.006 J	0.012	0.009 U	0.0055 J
Benzo(a)anthracene	MG/KG	8			0.28	0.046	0.21	0.12	0.1	0.13	0.11	0.086	0.045
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.32	0.062	0.25	0.13	0.096	0.16	0.21	0.16	0.087
Benzo(b)fluoranthene	MG/KG	24			0.31	0.071	0.3	0.12	0.088	0.13	0.16	0.12	0.081
Benzo(g,h,i)perylene	MG/KG	320000	2500	52000	0.34	0.087	0.25	0.17	0.14	0.21	0.19	0.2	0.14
Benzo(k)fluoranthene	MG/KG	240			0.12	0.027	0.11	0.075 J	0.045 J	0.072	0.074	0.05	0.036
Chrysene	MG/KG	770			0.33	0.068	0.36	0.19	0.16	0.16	0.18	0.13	0.077
Dibenz(a,h)anthracene	MG/KG	7			0.0078 U	0.0076 U	0.0078 U	0.0078 U	0.0076 U	0.0065 U	0.0075 U	0.0076 U	0.0086 U
Fluoranthene	MG/KG	12000	3200	59000	0.61	0.079	0.67	0.27 J	0.19 J	0.24	0.3	0.085	0.08
Fluorene	MG/KG	1600	2600	33000	0.044	0.0067 U	0.0069 U	0.0069 U	0.0066 U	0.0057 U	0.0066 U	0.0067 U	0.0075 U
Indeno(1,2,3-cd)pyrene	MG/KG	66			0.2	0.049	0.2	0.12	0.091	0.12	0.12	0.1	0.065
Naphthalene	MG/KG	12	55	300	0.0061 U	0.006 U	1.2	0.31	0.23	0.029	0.0059 U	0.006 U	0.0068 U
Phenanthrene	MG/KG	2500	2200	36000	0.32	0.019	0.23	0.075 J	0.05 J	0.068	0.062	0.013	0.024
Pyrene	MG/KG	8800	2400	45000	0.41	0.06	0.39	0.18 J	0.12 J	0.19	0.18	0.064	0.053
SW6020 (MG/KG)													
Arsenic	MG/KG		2.1	12	0.55 U	0.51 U	2	0.63 J	0.49 U	NA	0.63	0.42 U	NA
Lead	MG/KG		400	1400	417	17.4	908	63 J	128 J	NA	1140	11.3	NA
SW8082 (MG/KG)													
Aroclor-1016	MG/KG	170	0.5	2.6	0.025 U	0.024 U	0.024 U	0.025 U	0.024 U	0.025 U	0.029 U	0.03 U	NA
Aroclor-1221	MG/KG	170	0.5	2.6	0.023 U	0.022 U	0.022 U	0.023 U	0.023 U	0.023 U	0.027 U	0.028 U	NA
Aroclor-1232	MG/KG	170	0.5	2.6	0.038 U	0.037 U	0.038 U	0.038 U	0.038 U	0.039 U	0.044 U	0.047 U	NA
Aroclor-1242	MG/KG	170	0.5	2.6	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.024 U	0.026 U	NA
Aroclor-1248	MG/KG	170	0.5	2.6	0.021 U	0.02 U	0.021 U	0.021 U	0.021 U	0.021 U	0.024 U	0.026 U	NA
Aroclor-1254	MG/KG	170	0.5	2.6	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U	0.018 U	0.021 U	0.022 U	NA
Aroclor-1260	MG/KG	170	0.5	2.6	7.9 J	0.44	4.7 J	3.2 J	2 J	0.2	2.2 J	0.06	NA

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 RES - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL 1RES

Values Shaded Grey are hits that exceed the SCTL 1IND

TABLE 2 South DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location						S-SS-19		S-SS	S-20	S-SB-20	S-SS	S-21	S-SB-21
Sample ID					JM31-S-FD8-111710	S-SS-19-(000.5)-111710	S-SS-19-(0.502)-111710	S-SS20-(000.5)-111710	S-SS20-(0.502)-111710	S-SB20-(0204)-111710	S-SS21-(000.5)-111710	S-SS21-(0.502)-111710	S-SB21-(0204)-111710
Sample Depth (ft)					0 - 0.5	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	2 - 4	0 - 0.5	0.5 - 2	2 - 4
Sample Date					11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND									
PAH (MG/KG)													
1-Methylnaphthalene	MG/KG	31	200	1800	0.19 J	0.046 J	0.0096 U	0.0085 J	0.009 U	NA	0.024	0.0092 U	2.4
2-Methylnaphthalene	MG/KG	85	210	2100	0.045 U	0.011 U	0.0092 U	0.013 J	0.0085 U	NA	0.0088 U	0.0088 U	0.044 U
Acenaphthene	MG/KG	21	2400	20000	0.31 J	0.038 J	0.0073 U	0.0054 J	0.0068 U	NA	0.029	0.021 J	0.87
Acenaphthylene	MG/KG	270	1800	20000	0.044 U	0.01 U	0.0089 U	0.008 U	0.0083 U	NA	0.0086 U	0.0085 U	0.043 U
Anthracene	MG/KG	25000	21000	300000	0.45 J	0.061 J	0.0092 U	0.012 J	0.0085 U	NA	0.08	0.12 J	3.5
Benzo(a)anthracene	MG/KG	8			1.5 J	0.34 J	0.013	0.073 J	0.0077 U	NA	0.28	0.64 J	25
Benzo(a)pyrene	MG/KG	80	0.1	0.7	1.3 J	0.39 J	0.017	0.067 J	0.0083 U	NA	0.22	0.44 J	19
Benzo(b)fluoranthene	MG/KG	24			1.5 J	0.32 J	0.02	0.063 J	0.0059 U	NA	0.19	0.39 J	20
Benzo(g,h,i)perylene	MG/KG	320000	2500	52000	1.4 J	0.43 J	0.023	0.0069 U	0.0072 U	NA	0.17	0.43 J	14
Benzo(k)fluoranthene	MG/KG	240			0.54 J	0.18 J	0.0076 J	0.045 J	0.007 U	NA	0.078	0.17 J	8.7
Chrysene	MG/KG	770			2 J	0.58 J	0.028	0.14 J	0.0055 U	NA	0.3	0.74 J	26.3
Dibenz(a,h)anthracene	MG/KG	7			0.038 U	0.0091 U	0.0077 U	0.0069 UJ	0.0072 U	NA	0.0074 U	0.051 J	3
Fluoranthene	MG/KG	12000	3200	59000	3.7 J	0.9 J	0.079	0.19 J	0.008 J	NA	0.48	1.4 J	38
Fluorene	MG/KG	1600	2600	33000	0.31 J	0.076 J	0.0068 U	0.0061 U	0.0064 U	NA	0.07	0.0065 U	0.033 U
Indeno(1,2,3-cd)pyrene	MG/KG	66			0.72 J	0.24 J	0.013	0.046 J	0.007 U	NA	0.11	0.25 J	7.5
Naphthalene	MG/KG	12	55	300	1.1 J	0.0071 U	0.013	0.0055 U	0.0057 U	NA	0.0058 U	0.0058 U	0.03 U
Phenanthrene	MG/KG	2500	2200	36000	2.1 J	0.33 J	0.011 J	0.057 J	0.0072 U	NA	0.3	0.81 J	8.4
Pyrene	MG/KG	8800	2400	45000	2.5 J	0.62 J	0.027	0.67 J	0.024	NA	0.34	1 J	32
SW6020 (MG/KG)													
Arsenic	MG/KG		2.1	12	40.7 J	0.52 U	0.34 U	2.7	0.4 U	NA	0.96	0.46 U	NA
Lead	MG/KG		400	1400	987	1090	23.7	1110	76.4	NA	134	933	190
SW8082 (MG/KG)													
Aroclor-1016	MG/KG	170	0.5	2.6	0.03 U	0.036 U	0.03 U	0.028 U	0.029 U	0.02 U	0.029 U	0.03 U	0.018 U
Aroclor-1221	MG/KG	170	0.5	2.6	0.028 U	0.033 U	0.028 U	0.026 U	0.027 U	0.018 U	0.027 U	0.027 U	0.017 U
Aroclor-1232	MG/KG	170	0.5	2.6	0.046 U	0.055 U	0.046 U	0.043 U	0.044 U	0.03 U	0.045 U	0.045 U	0.028 U
Aroclor-1242	MG/KG	170	0.5	2.6	0.025 U	0.03 U	0.025 U	0.024 U	0.024 U	0.017 U	0.024 U	0.025 U	0.015 U
Aroclor-1248	MG/KG	170	0.5	2.6	0.025 U	0.03 U	0.025 U	0.024 U	0.024 U	0.017 U	0.024 U	0.025 U	0.015 U
Aroclor-1254	MG/KG	170	0.5	2.6	0.022 U	0.026 U	0.022 U	0.02 U	0.021 U	0.014 U	0.021 U	0.022 U	0.013 U
Aroclor-1260	MG/KG	170	0.5	2.6	16	12	0.37	6.4 J	2	0.0093 U	19	37	3.7

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 RES - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL ^{1RES}

Values Shaded Grey are hits that exceed the SCTL 1IND

TABLE 2 South DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location					S-SB-22	S-SS	5-23		S-SS-24		S-S:	S-25	S-SS	5-26	S-SS	S-27	S-S	S-28	S-S5	S-29
Sample ID	1				S-SB22-(0204)-111710	S-SS-23-000.5	S-SS-23-0.502	JM31-FD7-062311	S-SS-24-000.5	S-SS-24-0.502	S-SS-25-000.5	S-SS-25-0.502	S-SS-26-000.5	S-SS-26-0.502	S-SS-27-000.5	S-SS-27-0.502	S-SS-28-000.5	S-SS-28-0.502	S-SS-29-000.5	S-SS-29-0.502
Sample Depth (ft)					2 - 4	0 - 0.5	0.5 - 2	0 - 0.5	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2
Sample Date					11/17/2010	6/23/2011	6/23/2011	6/23/2011	6/23/2011	6/23/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND																
·																				
PAH (MG/KG)																				
1-Methylnaphthalene	MG/KG	31	200	1800	0.0075 J	0.34 J	0.0093	0.012	0.014	0.0082 J	0.0068 U	0.007 U	0.032	0.0068 U	0.015	0.0099	0.0068 U	NA	0.0067 U	0.0081 U
2-Methylnaphthalene	MG/KG	85	210	2100	0.0051 J	0.026 J	0.007 U	0.0064 U	0.0062 U	0.0051 J	0.0065 U	0.0067 U	0.0063 U	0.0065 U	0.0065 U	0.0077 U	0.0064 U	NA	0.0063 U	0.0077 U
Acenaphthene	MG/KG	21	2400	20000	0.007 U	0.026 J	0.0056 U	0.0051 U	0.0049 U	0.0055 U	0.0051 U	0.0053 U	0.003 J	0.0051 U	0.0052 U	0.0061 U	0.0051 U	NA	0.005 U	0.0061 U
Acenaphthylene	MG/KG	270	1800	20000	0.0086 U	0.02 J	0.0069 U	0.0054 J	0.0049 J	0.0067 U	0.068	0.0065 U	0.0061 U	0.0063 U	0.0064 U	0.0042 J	0.0062 U	NA	0.0062 U	0.0075 U
Anthracene	MG/KG	25000	21000	300000	0.0089 U	0.1 J	0.007 U	0.0064 U	0.0062 U	0.0069 U	0.013	0.0067 U	0.0097	0.0065 U	0.0048 J	0.0046 J	0.0064 U	NA	0.0063 U	0.0077 U
Benzo(a)anthracene	MG/KG	8			0.056	0.6 J	0.013	0.0069 J	0.02 J	0.012	0.095	0.006 U	0.063	0.0058 U	0.028	0.02	0.0058 U	NA	0.0057 U	0.0069 U
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.065	0.77 J	0.048	0.024	0.029	0.031	0.12	0.0065 U	0.1	0.0063 U	0.047	0.12	0.0062 U	NA	0.0088	0.0082 J
Benzo(b)fluoranthene	MG/KG	24			0.048	0.76 J	0.029	0.021 J	0.029 J	0.032	0.12	0.0046 U	0.096	0.0045 U	0.048	0.14	0.0044 U	NA	0.01	0.0092 J
Benzo(g,h,i)perylene	MG/KG	320000	2500	52000	0.078	0.92 J	0.026	0.038	0.049	0.039	0.18	0.0057 U	0.12	0.0055 U	0.07	0.16	0.0054 U	NA	0.013	0.012
Benzo(k)fluoranthene	MG/KG	240			0.019	0.37 J	0.012	0.0097 J	0.014 J	0.012	0.048	0.0055 U	0.043	0.0053 U	0.02	0.058	0.0053 U	NA	0.0038 J	0.0063 U
Chrysene	MG/KG	770			0.077	0.94 J	0.028	0.017 J	0.034 J	0.025	0.12	0.0043 U	0.095	0.0041 U	0.041	0.083	0.0041 U	NA	0.0062 J	0.005 U
Dibenz(a,h)anthracene	MG/KG	7			0.0073 J	0.025 J	0.006 U	0.0054 U	0.0052 U	0.0058 U	0.0061 J	0.0057 U	0.0037 J	0.0055 U	0.0055 U	0.0059 J	0.0054 U	NA	0.0054 U	0.0065 U
Fluoranthene	MG/KG	12000	3200	59000	0.076	1.5 J	0.044	0.059	0.055	0.027	0.19	0.0067 U	0.13	0.0065 U	0.07	0.046	0.0039 J	NA	0.012	0.0077 U
Fluorene	MG/KG	1600	2600	33000	0.0066 U	0.075 J	0.0052 U	0.0048 U	0.0044 J	0.0027 J	0.0072 J	0.005 U	0.053	0.0048 U	0.0034 J	0.0046 J	0.0048 U	NA	0.0047 U	0.0057 U
Indeno(1,2,3-cd)pyrene	MG/KG	66			0.039	0.43 J	0.02	0.018	0.024	0.024	0.09	0.0055 U	0.069	0.0053 U	0.037	0.093	0.0027 J	NA	0.0076 J	0.0074 J
Naphthalene	MG/KG	12	55	300	0.013	0.3 J	0.0083 B	0.0084	0.0068 B	0.007 B	0.03	0.0047 B	0.019	0.0043 U	0.012	0.011	0.0043 U	NA	0.0044 J	0.0052 U
Phenanthrene	MG/KG	2500	2200	36000	0.025	0.36 J	0.014	0.0099	0.011	0.0078 J	0.041	0.0057 U	0.038	0.0055 U	0.017	0.007 J	0.0054 U	NA	0.0028 J	0.0065 U
Pyrene	MG/KG	8800	2400	45000	0.067	0.99 J	0.032	0.024 J	0.039 J	0.023	0.13	0.0052 U	0.095	0.005 U	0.049	0.03	0.0049 U	NA	0.0089	0.0059 U
SW6020 (MG/KG)																				
Arsenic	MG/KG		2.1	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead	MG/KG		400	1400	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SW8082 (MG/KG)																				
Aroclor-1016	MG/KG	170	0.5	2.6	0.018 U	0.027 U	NA	0.026 U	0.026 U	NA	0.027 U	0.028 U	0.027 U	0.027 U	0.026 U	0.032 U	0.026 U	0.028 U	0.026 U	0.032 U
Aroclor-1221	MG/KG	170	0.5	2.6	0.017 U	0.025 U	NA	0.024 U	0.024 U	NA	0.025 U	0.026 U	0.025 U	0.025 U	0.024 U	0.029 U	0.024 U	0.025 U	0.024 U	0.03 U
Aroclor-1232	MG/KG	170	0.5	2.6	0.028 U	0.041 U	NA	0.04 U	0.04 U	NA	0.041 U	0.043 U	0.041 U	0.042 U	0.041 U	0.048 U	0.04 U	0.042 U	0.04 U	0.05 U
Aroclor-1242	MG/KG	170	0.5	2.6	0.015 U	0.023 U	NA	0.022 U	0.022 U	NA	0.023 U	0.024 U	0.022 U	0.023 U	0.022 U	0.027 U	0.022 U	0.023 U	0.022 U	0.027 U
Aroclor-1248	MG/KG	170	0.5	2.6	0.015 U	0.023 U	NA	0.022 U	0.022 U	NA	0.023 U	0.024 U	0.022 U	0.023 U	0.022 U	0.027 U	0.022 U	0.023 U	0.022 U	0.027 U
Aroclor-1254	MG/KG	170	0.5	2.6	0.013 U	0.02 U	NA	0.019 U	0.019 U	NA	0.02 U	0.02 U	0.019 U	0.02 U	0.019 U	0.023 U	0.019 U	0.02 U	0.019 U	0.024 U
Aroclor-1260	MG/KG	170	0.5	2.6	0.0085 U	4.8 J	NA	0.059 J	0.065 J	NA	0.28	0.013 U	0.15	0.013 U	0.17	0.015 U	0.039	0.013 U	0.09	0.015 U

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 RES - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL 1RES

Values Shaded Grey are hits that exceed the SCTL 1IND

TABLE 2 South DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location						S-SS-30		S-S	S-31	S-S:	5-32	S-SS	S-33		S-SS-34		S-S:	S-35	S-SB-31	S-SB-32	S-SB-33
Sample ID					JM31-FD6-062211	S-SS-30-000.5	S-SS-30-0.502	S-SS-31-000.5	S-SS-31-0.502	S-SS-32-000.5	S-SS-32-0.502	S-SS-33-000.5	S-SS-33-0.502	JM31-FD3-062211	S-SS-34-000.5	S-SS-34-0.502	S-SS-35-000.5	S-SS-35-0.502	S-SB-31-0204	S-SB-32-0204	S-SB-33-0204
Sample Depth ((1				0 - 0.5	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	0 - 0.5	0 - 0.5	0.5 - 2	0 - 0.5	0.5 - 2	2 - 4	2 - 4	2 - 4
Sample Date					6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND																	
PAH (MG/KG)																					
1-Methylnaphth	MG/KG	31	200	1800	0.011	0.014	0.041	0.026	0.0068 U	0.14 J	0.021	0.022	0.019	0.047 J	0.1 J	0.0092	0.084	NA	0.0049 J	0.0097 J	0.009 U
2-Methylnaphth	MG/KG	85	210	2100	0.0061 J	0.0089 J	0.085	0.006 J	0.0065 U	0.0065 U	0.0051 J	0.0081 J	0.0042 J	0.0078 J	0.015 J	0.0068 J	0.02	NA	0.0089 U	0.0079 U	0.0086 U
Acenaphthene	MG/KG	21	2400	20000	0.005 U	0.0052 U	0.0054 U	0.0039 J	0.0052 U	0.021 J	0.003 J	0.0039 J	0.0056 U	0.01 J	0.025 J	0.0054 U	0.01	NA	0.007 U	0.0063 U	0.0068 U
Acenaphthylene	MG/KG	270	1800	20000	0.0061 U	0.0064 U	0.0066 U	0.0063 U	0.0063 U	0.0063 U	0.0064 J	0.0063 U	0.0037 J	0.0065 U	0.0063 U	0.0066 U	0.007 J	NA	0.0086 U	0.0077 U	0.0084 U
Anthracene	MG/KG	25000	21000	300000	0.0063 U	0.0065 U	0.0068 U	0.0065 U	0.0065 U	0.052 J	0.0072 U	0.0073 J	0.0071 U	0.0067 U	0.046 J	0.0068 U	0.037 J	NA	0.0089 U	0.0079 U	0.0086 U
Benzo(a)anthra	MG/KG	8			0.017	0.022	0.0069 J	0.052	0.0058 U	0.33 J	0.049	0.033	0.043	0.1 J	0.21 J	0.0077 J	0.16	NA	0.013	0.018	0.0077 U
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.03	0.037	0.011	0.08	0.0063 U	0.34 J	0.11	0.072	0.074	0.12 J	0.25 J	0.038	0.15 J	NA	0.019	0.055	0.017
Benzo(b)fluoran	n MG/KG	24			0.038	0.037	0.018	0.078	0.0045 U	0.38 J	0.15	0.086	0.085	0.14 J	0.27 J	0.029	0.2 J	NA	0.017	0.033	0.014
Benzo(g,h,i)pery	MG/KG	320000	2500	52000	0.04	0.044	0.025	0.098	0.0055 U	0.32 J	0.12	0.091	0.1	0.14 J	0.25 J	0.04	0.13	NA	0.018	0.04	0.014
Benzo(k)fluoran		240			0.024	0.028	0.0093	0.033	0.0053 U	0.2 J	0.056	0.051	0.033	0.063 J	0.16 J	0.017	0.056 J	NA	0.0076 J	0.022	0.0073 J
Chrysene	MG/KG	770			0.028 J	0.044 J	0.029	0.091	0.0042 U	0.44 J	0.1	0.087	0.079	0.17 J	0.36 J	0.027	0.26	NA	0.018	0.03	0.011
Dibenz(a,h)anth		7			0.0053 U	0.0055 U	0.0057 U	0.0062 J	0.0055 U	0.0055 U	0.0061 U	0.0055 U	0.0064 J	0.0056 U	0.0055 U	0.0057 U	0.0056 U	NA	0.0075 U	0.0067 U	0.0073 U
Fluoranthene	MG/KG	12000	3200	59000	0.056 J	0.081 J	0.026	0.13	0.0065 U	0.78 J	0.086	0.17	0.082	0.0067 U	1.2 J	0.041	0.96 J	NA	0.028	0.044	0.018
Fluorene	MG/KG	1600	2600	33000	0.0047 U	0.0048 U	0.005 U	0.0044 J	0.0048 U	0.0048 U	0.0054 U	0.0048 U	0.0043 J	0.018 J	0.035 J	0.005 U	0.014	NA	0.0066 U	0.0059 U	0.0064 U
Indeno(1,2,3-cd	· · · · · ·	66			0.024	0.025	0.026	0.056	0.0053 U	0.21 J	0.069	0.038	0.053	0.091 J	0.16 J	0.017	0.083	NA	0.012	0.026	0.01 J
Naphthalene	MG/KG	12	55	300	0.025	0.026	0.091	0.027	0.0043 U	0.24 J	0.015	0.03	0.018	0.052 J	0.11 J	0.0083 J	0.084	NA	0.0033 J	0.0078 J	0.0046 J
Phenanthrene	MG/KG	2500	2200	36000	0.017	0.021	0.023	0.029	0.0055 U	0.24 J	0.022	0.033	0.021	0.088 J	0.18 J	0.012	0.17 J	NA	0.0053 J	0.013	0.0046 J
Pyrene	MG/KG	8800	2400	45000	0.029 J	0.047 J	0.016	0.082	0.005 U	0.52 J	0.067	0.08	0.065	0.17 J	0.38 J	0.026	0.27 J	NA	0.02	0.032	0.018
SW6020 (MG/K																					
Arsenic	MG/KG		2.1	12	NA	NA	NA	NA	NA	NA	NA	NA	NA	2.2 JB	1.4 JB	NA	1.4	NA	NA	NA	NA
Lead	MG/KG		400	1400	NA	NA	NA	NA	NA	NA	NA	1030 B	NA	3320 JB	1580 JB	NA	1300 B	NA	NA	NA	NA
SW8082 (MG/K	, ,																				
Aroclor-1016	MG/KG	170	0.5	2.6	0.027 U	0.027 U	0.028 U	0.027 U	NA	0.016 U	0.018 U	0.016 U	0.018 U	0.017 U	0.017 U	NA	0.017 U	0.039	NA	NA	NA
Aroclor-1221	MG/KG	170	0.5	2.6	0.025 U	0.025 U	0.026 U	0.025 U	NA	0.015 U	0.017 U	0.015 U	0.017 U	0.016 U	0.015 U	NA	0.016 U	0.017 U	NA	NA	NA
Aroclor-1232	MG/KG	170	0.5	2.6	0.041 U	0.042 U	0.043 U	0.041 U	NA	0.025 U	0.028 U	0.025 U	0.028 U	0.026 U	0.026 U	NA	0.026 U	0.029 U	NA	NA	NA
Aroclor-1242	MG/KG	170	0.5	2.6	0.023 U	0.023 U	0.024 U	0.023 U	NA	0.014 U	0.016 U	0.014 U	0.015 U	0.014 U	0.014 U	NA	0.014 U	0.016 U	NA	NA	NA
Aroclor-1248	MG/KG	170	0.5	2.6	0.023 U	0.023 U	0.024 U	0.023 U	NA	0.014 U	0.016 U	0.014 U	0.015 U	0.014 U	0.014 U	NA	0.014 U	0.016 U	NA	NA	NA
Aroclor-1254	MG/KG	170	0.5	2.6	0.02 U	0.02 U	0.02 U	0.02 U	NA	0.012 U	0.013 U	0.012 U	0.013 U	0.012 U	0.012 U	NA	0.012 U	0.014 U	NA	NA	NA
Aroclor-1260	MG/KG	170	0.5	2.6	1.6	1.8	0.34 J	0.64	NA	0.62	0.036	2	0.0078 J	2.9	3.2	NA	3.2 J	0.088	NA	NA	NA

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 RES - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL 1RES

Values Shaded Grey are hits that exceed the SCTL 1IND

TABLE 2 South DRMO Sliver Data Summary DRMO Land Slivers, NAS Key West

Location					S-SB-3	4	S-SB-36	S-SB-37	S-SB-38
Sample ID					JM31-FD4-062211	S-SB-34-0204	S-SB-36-0204	S-SB-37-0204	S-SB-38-0204
Sample Depth					2 - 4	2 - 4	2 - 4	2 - 4	2 - 4
Sample Date					6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Analyte	Units	SCTL LGW ^{1LY/PQ}	SCTL 1RES	SCTL 1IND					
PAH (MG/KG)									
1-Methylnapht	MG/KG	31	200	1800	0.0079 J	0.013 J	0.0095 U	0.0059 J	0.048
2-Methylnapht	MG/KG	85	210	2100	0.005 J	0.007 J	0.009 U	0.0074 U	0.022
Acenaphthene	MG/KG	21	2400	20000	0.0062 U	0.0064 U	0.0072 U	0.0059 U	0.0097 J
Acenaphthylen	MG/KG	270	1800	20000	0.0076 U	0.0078 U	0.0088 U	0.0072 U	0.0046 J
Anthracene	MG/KG	25000	21000	300000	0.0078 U	0.008 U	0.009 U	0.0074 U	0.026
Benzo(a)anthra	MG/KG	8			0.016	0.014	0.0081 U	0.015	0.083
Benzo(a)pyrene	MG/KG	80	0.1	0.7	0.026 J	0.044 J	0.0088 U	0.014	0.07
Benzo(b)fluora	MG/KG	24			0.018 J	0.044 J	0.0062 U	0.012	0.051
Benzo(g,h,i)per	MG/KG	320000	2500	52000	0.023 J	0.046 J	0.0076 U	0.014	0.067
Benzo(k)fluorai	MG/KG	240			0.0088 J	0.016 J	0.0074 U	0.0054 J	0.024
Chrysene	MG/KG	770			0.017 J	0.034 J	0.0058 U	0.024	0.1
Dibenz(a,h)antl	MG/KG	7			0.0066 U	0.0068 U	0.0076 U	0.0063 U	0.0084 J
Fluoranthene	MG/KG	12000	3200	59000	0.031 J	0.057 J	0.009 U	0.032	0.19
Fluorene	MG/KG	1600	2600	33000	0.0058 U	0.0043 J	0.0067 U	0.0055 U	0.012
Indeno(1,2,3-co	MG/KG	66			0.016 J	0.028 J	0.0074 U	0.01	0.05
Naphthalene	MG/KG	12	55	300	0.0056 J	0.014 J	0.0034 J	0.0065 J	0.046
Phenanthrene	MG/KG	2500	2200	36000	0.012 J	0.02 J	0.0076 U	0.015	0.15
Pyrene	MG/KG	8800	2400	45000	0.023 J	0.034 J	0.0069 U	0.025	0.14
SW6020 (MG/H	(G)								
Arsenic	MG/KG		2.1	12	NA	NA	NA	NA	NA
Lead	MG/KG		400	1400	NA	NA	NA	NA	NA
SW8082 (MG/H	(G)								
Aroclor-1016	MG/KG	170	0.5	2.6	NA	NA	0.038 U	0.03 U	0.032 U
Aroclor-1221	MG/KG	170	0.5	2.6	NA	NA	0.035 U	0.028 U	0.03 U
Aroclor-1232	MG/KG	170	0.5	2.6	NA	NA	0.058 U	0.047 U	0.05 U
Aroclor-1242	MG/KG	170	0.5	2.6	NA	NA	0.032 U	0.026 U	0.027 U
Aroclor-1248	MG/KG	170	0.5	2.6	NA	NA	0.032 U	0.026 U	0.027 U
Aroclor-1254	MG/KG	170	0.5	2.6	NA	NA	0.027 U	0.022 U	0.024 U
Aroclor-1260	MG/KG	170	0.5	2.6	NA	NA	0.018 U	0.3	0.055

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 RES - Soil Cleanup Target Level Residential.

SCTL 1 IND - Soil Cleanup Target Level Industrial.

SCTL LGW^{1LY/PQ} - Leachability based on Groundwater of Low Yield / Poor Quality.

Values Bolded are analytes not detected by the Lab but are above the SCTL ^{1RES}

Values Shaded Pale Yellow are analytes not detected by the Lab but are above the SCTL ^{1IND}

Values Bolded and Shaded Pale Yellow are analytes not detected by the Lab but are above both SCTL ^{1RES} and SCTL ^{1IND}

Values Bold and Pale Blue are hits exceeding the SCTL 1RES

Values Shaded Grey are hits that exceed the SCTL 1IND

Values Bolded and Shaded Green are hits exceeding the **SCTL LGW**^{1LY/PQ}
Values Bold and Shaded Grey are hits that exceed both **SCTL** ^{1RES,} **SCTL** ^{1LY/PQ} and **SCTL** ^{1IND}

Page 8 of 8

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			N-SS-01	N-SS-01	N-SS-02	N-SS-02	N-SS-02	N-SB-02	N-SS-03	N-SS-03
SampleID			N-SS-01-(0_502)-111710	N-SS-01-(000_5)-111710	N-SS-02-(0_502)-111710	N-SS-02-(000_5)-111710	JM31-N-FD3-111710	N-SB-02-(0204)-111710	N-SS-03-(0_502)-111710	N-SS-03-(000_5)-111710
Sample Date			11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Parameter	Units	SCTL								
SW8310										
Benzo(a)anthracene	MG/KG		0.0014	0.0086	0.0065 J	0.0033	0.063 J	0.00039 U	0.000375 U	0.0004 J
Benzo(a)pyrene	MG/KG		0.014	0.069	0.28 J	0.047	0.48 J	0.0092 J	0.0041 U	0.0072 J
Benzo(b)fluoranthene	MG/KG		0.0021	0.01	0.03 J	0.0043	0.044 J	0.001 J	0.00029 U	0.00097 J
Benzo(k)fluoranthene	MG/KG		0.000069 J	0.00037	0.0013 J	0.00025	0.0025 J	0.0000355 U	0.0000345 U	0.00005 J
Chrysene	MG/KG		0.000021	0.00011	0.00015 J	0.00005	0.00067 J	0.0000054 J	0.0000027 U	0.0000095 J
Dibenz(a,h)anthracene	MG/KG		0.0048 U	0.014	0.00365 U	0.00365 U	0.00365 U	0.0037 U	0.00355 U	0.00345 U
Indeno(1,2,3-cd)pyrene	MG/KG		0.00091 J	0.005	0.019	0.0041	0.024 J	0.0012	0.000345 U	0.00066 J
Total BEQs			0.0233	0.10708	0.3406	0.06265	0.61782	0.0155309	0.0086972	0.0127395
	Industrial Exposure Limit	0.7								
St	 CTL Industrial Failure?		NO	NO	NO	NO	NO	NO	NO	NO
	TE maderial randic.		110	110	110	110	110	110	110	110
	Residential Exposure Limit	0.1								
SC	 TL Residential Failure?		NO	YES	YES	NO	YES	NO	NO	NO
	Leachability GW LY/PQ Limit	80								
SCTL Lea	high a bility GW LY/PQ Failure?		NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
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- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			N-SS-04	N-SS-04	N-SS-04	N-SS-05	N-SS-05	N-SB-05	N-SS-06	N-SS-07	N-SS-08
SampleID	1		N-SS-04-(0_502)-111710	N-SS-04-(000_5)-111710	JM31-N-FD2-111710	N-SS-05-(0_502)-111710	N-SS-05-(000_5)-111710	N-SB-05-(0204)-111710	N-SS-06-0.502	N-SS-07-0.502	N-SS-08-000.5
Sample Date			11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	6/22/2011	6/22/2011	6/22/2011
Parameter	Units	SCTL									
SW8310											
Benzo(a)anthracene	MG/KG		0.0039	0.0034 J	0.099 J	0.0066	0.0043	0.0018	0.0003 U	0.003	0.0085
Benzo(a)pyrene	MG/KG		0.057	0.21 J	0.71 J	0.08	0.069	0.031	0.0086	0.11	0.093
Benzo(b)fluoranthene	MG/KG		0.0052	0.018 J	0.099 J	0.0077	0.0066	0.0026	0.0011	0.014	0.0098
Benzo(k)fluoranthene	MG/KG		0.00028	0.00092 J	0.004 J	0.00032	0.00028	0.00013	0.000036 J	0.00045	0.00041
Chrysene	MG/KG		0.000057	0.00033 J	0.0012 J	0.000085	0.000076	0.000026	0.0000038 J	0.000078	0.00011
Dibenz(a,h)anthracene	MG/KG		0.0037 U	0.0041 U	0.00365 U	0.00365 U	0.0037 U	0.0037 U	0.00285 U	0.011	0.00275 U
Indeno(1,2,3-cd)pyrene	MG/KG		0.004	0.012 J	0.038 J	0.0061	0.0054	0.0026	0.00086	0.0086	0.0088
Total BEQs			0.074137	0.24875	0.95485	0.104455	0.089356	0.041856	0.0137498	0.147128	0.12337
	Industrial Exposure Limit	0.7									
SCTI	 Industrial Failure?		NO	NO	YES	NO	NO	NO	NO	NO	NO
3011	illuustiiai Fallule:		NO	NO	TES	NO	NO	NO	NO	NO	NO
	Residential Exposure Limit	0.1									
SCTL R	 Residential Failure?		NO	YES	YES	YES	NO	NO	NO	YES	YES
	Leachability GW Low Yield L	80									
SCTL Leachabi	lity GW Low Yield Failure?		NO	NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

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- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
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- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			N-SS-09	N-SS-10	S-SS-06	S-SS-06	S-SS-07	S-SS-07	S-SB-07	S-SS-08	S-SS-08
SampleID	1		N-SS-09-000.5	N-SS-10-0.502	S-SS-06-(0_502)-111710	S-SS-06-(000_5)-111710	S-SS-07-(0_502)-111710	S-SS-07-(000_5)-111710	S-SB-07-(0204)-111710	S-SS-08-(0_502)-111710	S-SS-08-(000_5)-111710
Sample Date			6/22/2011	6/22/2011	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Parameter	Units	SCTL									
SW8310											
ene	MG/KG		0.16 J	0.0019	0.000395 UJ	0.005 J	0.01	0.021	0.006	0.0038	0.04 J
Benzo(a)pyrene	MG/KG		1 J	0.031	0.0043 UJ	0.12 J	0.14	0.17	0.043	0.048	0.57 J
hene	MG/KG		0.17 J	0.0034	0.000305 UJ	0.017 J	0.01	0.014	0.0049	0.0041	0.039 J
hene	MG/KG		0.0053 J	0.00015	0.0000365 UJ	0.00046 J	0.00051	0.00074	0.00019	0.00023	0.0022 J
Chrysene	MG/KG		0.0022 J	0.000028	0.00000285 UJ	0.00013 J	0.00014	0.00025	0.000076	0.00006	0.00062 J
acene	MG/KG		0.066 J	0.0028 U	0.00375 UJ	0.0037 UJ	0.0036 U	0.00365 U	0.00315 U	0.00365 U	0.0036 U
cd)pyrene	MG/KG		0.056 J	0.0024	0.000365 UJ	0.00036 UJ	0.0094	0.0098	0.0024	0.0035	0.043 J
Total BEQs			1.4595	0.041678	0.00915435	0.14665	0.17365	0.21944	0.059716	0.06334	0.69842
	Industrial Exposure Limit	0.7									
	SCTL Industrial Failure?		YES	NO	NO	NO	NO	NO	NO	NO	NO
	Residential Exposure Limit	0.1									
	Residential Exposure Limit	0.1									
	SCTL Residential Failure?		YES	NO	NO	YES	YES	YES	NO	NO	YES
	Leachability GW Low Yield Lir	80									
SCTL Lea	 achability GW Low Yield Failure	?	NO	NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

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- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			S-SS-09	S-SS-09	S-SS-09	S-SS-10	S-SS-10	S-SB-10	S-SS-11	S-SS-11
SampleID			S-SS-09-(0_502)-111710	S-SS-09-(000_5)-111710	JM31-S-FD4-111710	S-SS-10-(0_502)-111710	S-SS-10-(000_5)-111710	S-SB-10-(0204)-111710	S-SS-11-(0_502)-111710	S-SS-11-(000_5)-111710
Sample Date			11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Parameter	Units	SCTL								
SW8310										
Benzo(a)anthracene	MG/KG		0.00064 J	0.0024	0.0032	0.009	0.014	0.0014	0.00052 J	0.00071 J
Benzo(a)pyrene	MG/KG		0.012	0.05	0.052	0.14	0.2	0.04	0.013	0.011
Benzo(b)fluoranthene	MG/KG		0.0016	0.0044	0.0043	0.0094	0.015	0.0034	0.0015	0.001 J
Benzo(k)fluoranthene	MG/KG		0.000051 J	0.00019	0.0002	0.00053	0.0008	0.00014	0.000047 J	0.000049 J
Chrysene	MG/KG		0.00001	0.000049	0.000051	0.00013	0.0002	0.00003	0.00001 J	0.000011
Dibenz(a,h)anthracene	MG/KG		0.0034 U	0.00345 U	0.0034 U	0.0038 U	0.00365 U	0.00305 U	0.00355 U	0.0035 U
Indeno(1,2,3-cd)pyrene	MG/KG		0.0011	0.0038	0.0041	0.011	0.015	0.0034	0.0013	0.00091 J
Total BEQs			0.018801	0.064289	0.067251	0.17386	0.24865	0.05142	0.019927	0.01718
	Industrial Exposure Limit	0.7								
SCT	 'L Industrial Failure?		NO	NO	NO	NO	NO	NO	NO	NO
	Residential Exposure Limit	0.1								
CCT	Desidential Fathers		NO	NO	NO	VEO	V50	NO	110	NO
SCI	Residential Failure?	1	NO	NO	NO	YES	YES	NO	NO	NO
	Leachability GW Low Yield Limit	80								
SCTL Leacha	bility GW Low Yield Failure?		NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

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- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			S-SS-12	S-SS-12	S-SS-12	S-SS-13	S-SS-13	S-SS-14	S-SS-14	S-SS-14
SampleID	1		S-SS-12-(0_502)-111710	S-SS-12-(000_5)-111710	JM31-S-FD5-111710	S-SS-13-(0_502)-111710	S-SS-13-(000_5)-111710	S-SS-14-(0_502)-111710	S-SS-14-(000_5)-111710	JM31-S-FD6-111710
Sample Date			11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Parameter	Units	SCTL								
SW8310										
Benzo(a)anthracene	MG/KG		0.0021 J	0.018	0.01 J	0.000355 U	0.00078 J	0.007	0.023	0.018
Benzo(a)pyrene	MG/KG		0.024 J	0.085	0.2 J	0.00385 U	0.016	0.14	0.33 J	0.18 J
Benzo(b)fluoranthene	MG/KG		0.0028 J	0.012	0.019 J	0.000275 U	0.0017	0.0079	0.023	0.017
Benzo(k)fluoranthene	MG/KG		0.00009 J	0.00048	0.00087 J	0.0000325 U	0.00007 J	0.00055	0.0017 J	0.00077 J
Chrysene	MG/KG		0.000037 J	0.0002	0.0002 J	0.0000025 U	0.000015	0.00018	0.00038 J	0.00026 J
Dibenz(a,h)anthracene	MG/KG		0.00365 U	0.00375 U	0.0037 UJ	0.00335 U	0.00335 U	0.00385 U	0.0038 U	0.00385 U
Indeno(1,2,3-cd)pyrene	MG/KG		0.0017 J	0.0031	0.014 J	0.000325 U	0.0018	0.0092	0.022 J	0.011 J
Total BEQs			0.034377	0.12253	0.24777	0.00819	0.023715	0.16868	0.40388	0.23088
	Industrial Exposure Limit	0.7								
SCT	L Industrial Failure?		NO	NO	NO	NO	NO	NO	NO	NO
	Residential Exposure Limit	0.1								
SCTI	 . Residential Failure?		NO	YES	YES	NO	NO	YES	YES	YES
	Leachability GW Low Yield Lin	80								
SCTL Leacha	<u> </u>		NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

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- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			S-SB-14	S-SS-15	S-SS-15	S-SB-15	S-SS-16	S-SS-16	S-SS-17	S-SS-17
SampleID			S-SB-14-(0204)-111710	S-SS-15-(0_502)-111710	S-SS-15-(000_5)-111710	S-SB-15-(0204)-111710	S-SS-16-(0_502)-111710	S-SS-16-(000_5)-111710	S-SS-17-(0_502)-111710	S-SS-17-(000_5)-111710
Sample Date			11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Parameter	Units	SCTL								
SW8310										
Benzo(a)anthracene	MG/KG		0.0011	0.0011 J	0.0023	0.0014	0.0046	0.028	0.01	0.021
Benzo(a)pyrene	MG/KG		0.025	0.12	0.055	0.082	0.062	0.32	0.096	0.25
Benzo(b)fluoranthene	MG/KG		0.0024	0.0093	0.011	0.0059	0.0071	0.031	0.0088	0.03
Benzo(k)fluoranthene	MG/KG		0.000098	0.00052	0.00027	0.00018	0.00027	0.0012	0.00045 J	0.0011
Chrysene	MG/KG		0.000022	0.000048	0.00011	0.000028	0.000068	0.00033	0.00016	0.00036
Dibenz(a,h)anthracene	MG/KG		0.003 U	0.00385 U	0.00365 U	0.00315 U	0.0038 U	0.0039 U	0.0038 U	0.0039 U
Indeno(1,2,3-cd)pyrene	MG/KG		0.0022	0.01	0.0047	0.0075	0.0049	0.02	0.0091	0.02
Total BEQs			0.03382	0.144818	0.07703	0.100158	0.082738	0.40443	0.12831	0.32636
	Industrial Exposure Limit	0.7								
SC	TL Industrial Failure?		NO	NO	NO	NO	NO	NO	NO	NO
	Decidential France and Limit	0.4								
	Residential Exposure Limit	0.1								
SCT	L Residential Failure?		NO	YES	NO	YES	NO	YES	YES	YES
	Leachability GW Low Yield Li	80								
SCTL Leach	ability GW Low Yield Failure?		NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

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- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			S-SS-17	S-SB-17	S-SS-18	S-SS-18	S-SB-18	S-SS-19	S-SS-19	S-SS-19
SampleID			JM31-S-FD7-111710	S-SB-17-(0204)-111710	S-SS-18-(0_502)-111710	S-SS-18-(000_5)-111710	S-SB-18-(0204)-111710	S-SS-19-(0_502)-111710	S-SS-19-(000_5)-111710	JM31-S-FD8-111710
Sample Date			11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Parameter	Units	SCTL								
SW8310										
Benzo(a)anthracene	MG/KG		0.012	0.013	0.0086	0.011	0.0045	0.0013	0.034 J	0.15 J
Benzo(a)pyrene	MG/KG		0.13	0.16	0.16	0.21	0.087	0.017	0.39 J	1.3 J
Benzo(b)fluoranthene	MG/KG		0.012	0.013	0.012	0.016	0.0081	0.002	0.032 J	0.15 J
Benzo(k)fluoranthene	MG/KG		0.00075 J	0.00072	0.0005	0.00074	0.00036	0.000076 J	0.0018 J	0.0054 J
Chrysene	MG/KG		0.00019	0.00016	0.00013	0.00018	0.000077	0.000028	0.00058 J	0.002 J
Dibenz(a,h)anthracene	MG/KG		0.0039 U	0.00325 U	0.0038 U	0.00375 U	0.0043 U	0.00385 U	0.00455 U	0.019 U
Indeno(1,2,3-cd)pyrene	MG/KG		0.012	0.012	0.01	0.012	0.0065	0.0013	0.024 J	0.072 J
Total BEQs			0.17084	0.20213	0.19503	0.25367	0.110837	0.025554	0.48693	1.6984
	Industrial Exposure Limit	0.7								
SCTL	Industrial Failure?		NO	NO	NO	NO	NO	NO	NO	YES
	Residential Exposure Limit	0.1								
	Residential Exposure Limit	0.1								
SCTL F	Residential Failure?	1	YES	YES	YES	YES	YES	NO	YES	YES
	Leachability GW Low Yield Lim	80								
			_							
SCTL Leachab	ility GW Low Yield Failure?		NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

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- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
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- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			S-SS-20	S-SS-20	S-SS-21	S-SS-21	S-SB-21	S-SS-22	S-SS-22	S-SB-22
SampleID			S-SS20-(0_502)-111710	S-SS20-(000_5)-111710	S-SS21-(0_502)-111710	S-SS21-(000_5)-111710	S-SB21-(0204)-111710	S-SS22-(0_502)-111710	S-SS22-(000_5)-111710	S-SB22-(0204)-111710
Sample Date			11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010	11/17/2010
Parameter	Units	SCTL								
SW8310										
Benzo(a)anthracene	MG/KG		0.000385 U	0.0073 J	0.064 J	0.028	2.5	0.014	0.013	0.0056
Benzo(a)pyrene	MG/KG		0.00415 U	0.067 J	0.44 J	0.22	19	0.13	0.18	0.065
Benzo(b)fluoranthene	MG/KG		0.000295 U	0.0063 J	0.039 J	0.019	2	0.012	0.02	0.0048
Benzo(k)fluoranthene	MG/KG		0.000035 U	0.00045 J	0.0017 J	0.00078	0.087	0.00045	0.00069	0.00019
Chrysene	MG/KG		0.00000275 U	0.00014 J	0.00074 J	0.0003	0.0263	0.00019	0.00022	0.000077
Dibenz(a,h)anthracene	MG/KG		0.0036 U	0.00345 UJ	0.051 J	0.0037 U	2.6	0.014	0.016	0.0073 J
Indeno(1,2,3-cd)pyrene	MG/KG		0.00035 U	0.0046 J	0.025 J	0.011	0.75	0.0066	0.011	0.0039
Total BEQs			0.00881775	0.08924	0.62144	0.28278	26.9633	0.17724	0.24091	0.086867
	Industrial Exposure Limit	0.7								
SC	TL Industrial Failure?		NO	NO	NO	NO	YES	NO	NO	NO
	Residential Exposure Limit	0.1								
	•									
SC	TL Residential Failure?		NO	NO	YES	YES	YES	YES	YES	NO
	Leachability GW Low Yield Li	80								
SCTL Leach	ll ability GW Low Yield Failure?		NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
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- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			S-SS-23	S-SS-23	S-SS-24	S-SS-24	S-SS-24	S-SS-25	S-SS-25	S-SS-26	S-SS-26	S-SS-27	S-SS-27	S-SS-28	S-SS-29
SampleID			S-SS-23-000.5	S-SS-23-0.502	JM31-FD7-062311	S-SS-24-000.5	S-SS-24-0.502	S-SS-25-000.5	S-SS-25-0.502	S-SS-26-000.5	S-SS-26-0.502	S-SS-27-000.5	S-SS-27-0.502	S-SS-28-000.5	S-SS-29-000.5
Sample Date			6/23/2011	6/23/2011	6/23/2011	6/23/2011	6/23/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Parameter	Units	SCTL													
SW8310															
Benzo(a)anthracene	MG/KG		0.06 J	0.0013	0.00069 J	0.002 J	0.0012	0.0095	0.0003 U	0.0063	0.00029 U	0.0028	0.002	0.00029 U	0.000285 U
Benzo(a)pyrene	MG/KG		0.77 J	0.048	0.024	0.029	0.031	0.12	0.00325 U	0.1	0.00315 U	0.047	0.12	0.0031 U	0.0088
Benzo(b)fluoranthene	MG/KG		0.076 J	0.0029	0.0021 J	0.0029 J	0.0032	0.012	0.00023 U	0.0096	0.000225 U	0.0048	0.014	0.00022 U	0.001
Benzo(k)fluoranthene	MG/KG		0.0037 J	0.00012	0.000097 J	0.00014 J	0.00012	0.00048	0.0000275 U	0.00043	0.0000265 U	0.0002	0.00058	0.0000265 U	0.000038 J
Chrysene	MG/KG		0.00094 J	0.000028	0.000017 J	0.000034 J	0.000025	0.00012	0.00000215 U	0.000095	0.00000205 U	0.000041	0.000083	0.00000205 U	0.0000062 J
Dibenz(a,h)anthracene	MG/KG		0.025 J	0.003 U	0.0027 U	0.0026 U	0.0029 U	0.0061 J	0.00285 U	0.0037 J	0.00275 U	0.00275 U	0.0059 J	0.0027 U	0.0027 U
Indeno(1,2,3-cd)pyrene	MG/KG		0.043 J	0.002	0.0018	0.0024	0.0024	0.009	0.000275 U	0.0069	0.000265 U	0.0037	0.0093	0.00027 J	0.00076 J
Total BEQs			0.97864	0.057348	0.031404	0.039074	0.040845	0.1572	0.00693465	0.127025	0.00670855	0.061291	0.151863	0.00660855	0.0135892
	Industrial Exposure Limit	0.7													
SCTL	Industrial Failure?		YES	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	Basisla saial Essa a sana Lincia														
	Residential Exposure Limit	0.1													
SCTLI	I		YES	NO	NO	NO	NO	YES	NO	YES	NO	NO	YES	NO	NO
	Leachability GW Low Yield I	80	120	140	140	140	110	120	110	120	140	110	120	110	110
	Leadinability GVV LOW Held I	00													
SCTL Leachab	ility GW Low Yield Failure?		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			S-SS-29	S-SS-30	S-SS-30	S-SS-30	S-SS-31	S-SS-31	S-SS-32	S-SS-32	S-SS-33	S-SS-33	S-SS-34	S-SS-34	S-SS-34
SampleID	1		S-SS-29-0.502	JM31-FD6-062211	S-SS-30-000.5	S-SS-30-0.502	S-SS-31-000.5	S-SS-31-0.502	S-SS-32-000.5	S-SS-32-0.502	S-SS-33-000.5	S-SS-33-0.502	JM31-FD3-062211	S-SS-34-000.5	S-SS-34-0.502
Sample Date			6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Parameter	Units	SCTL													
SW8310															
ene	MG/KG		0.000345 U	0.0017	0.0022	0.00069 J	0.0052	0.00029 U	0.033 J	0.0049	0.0033	0.0043	0.01 J	0.021 J	0.00077 J
Benzo(a)pyrene	MG/KG		0.0082 J	0.03	0.037	0.011	0.08	0.00315 U	0.34 J	0.11	0.072	0.074	0.12 J	0.25 J	0.038
hene	MG/KG		0.00092 J	0.0038	0.0037	0.0018	0.0078	0.000225 U	0.038 J	0.015	0.0086	0.0085	0.014 J	0.027 J	0.0029
hene	MG/KG		0.0000315 U	0.00024	0.00028	0.000093	0.00033	0.0000265 U	0.002 J	0.00056	0.00051	0.00033	0.00063 J	0.0016 J	0.00017
Chrysene	MG/KG		0.0000025 U	0.000028 J	0.000044 J	0.000029	0.000091	0.0000021 U	0.00044 J	0.0001	0.000087	0.000079	0.00017 J	0.00036 J	0.000027
acene	MG/KG		0.00325 U	0.00265 U	0.00275 U	0.00285 U	0.0062 J	0.00275 U	0.00275 U	0.00305 U	0.00275 U	0.0064 J	0.0028 U	0.00275 U	0.00285 U
cd)pyrene	MG/KG		0.00074 J	0.0024	0.0025	0.0026	0.0056	0.000265 U	0.021 J	0.0069	0.0038	0.0053	0.0091 J	0.016 J	0.0017
Total BEQs			0.013489	0.040818	0.048474	0.019062	0.105221	0.0067086	0.43719	0.14051	0.091047	0.098909	0.1567	0.31871	0.046417
	Industrial Exposure Limit	0.7													
9	 GCTL Industrial Failure?		NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO
	Residential Exposure Limit	0.1													
	Residential Exposure Ellint	0.1													
S	CTL Residential Failure?		NO	NO	NO	NO	YES	NO	YES	YES	NO	NO	YES	YES	NO
	Leachability GW Low Yield Li	80													
SCTL Lead	chability GW Low Yield Failure	?	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

TABLE 3
BEQ Data Summary
DRMO Land Slivers, NAS Key West

StationID			S-SS-35	S-SB-31	S-SB-32	S-SB-33	S-SB-34	S-SB-34	S-SB-36	S-SB-37	S-SB-38
SampleID			S-SS-35-000.5	S-SB-31-0204	S-SB-32-0204	S-SB-33-0204	JM31-FD4-062211	S-SB-34-0204	S-SB-36-0204	S-SB-37-0204	S-SB-38-0204
Sample Date			6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Parameter	Units	SCTL									
SW8310											
Benzo(a)anthracene	MG/KG		0.016	0.0013	0.0018	0.000385 U	0.0016	0.0014	0.000405 U	0.0015	0.0083
Benzo(a)pyrene	MG/KG		0.15 J	0.019	0.055	0.017	0.026 J	0.044 J	0.0044 U	0.014	0.07
Benzo(b)fluoranthene	MG/KG		0.02 J	0.0017	0.0033	0.0014	0.0018 J	0.0044 J	0.00031 U	0.0012	0.0051
Benzo(k)fluoranthene	MG/KG		0.00056 J	0.000076 J	0.00022	0.000073 J	0.000088 J	0.00016 J	0.000037 U	0.000054 J	0.00024
Chrysene	MG/KG		0.00026	0.000018	0.00003	0.000011	0.000017 J	0.000034 J	0.0000029 U	0.000024	0.0001
Dibenz(a,h)anthracene	MG/KG		0.0028 U	0.00375 U	0.00335 U	0.00365 U	0.0033 U	0.0034 U	0.0038 U	0.00315 U	0.0084 J
Indeno(1,2,3-cd)pyrene	MG/KG		0.0083	0.0012	0.0026	0.001 J	0.0016 J	0.0028 J	0.00037 U	0.001	0.005
Total BEQs			0.19792	0.027044	0.0663	0.023519	0.034405	0.056194	0.0093249	0.020928	0.09714
	Industrial Exposure Limit	0.7									
SCTI In	dustrial Failure?		NO	NO	NO	NO	NO	NO	NO	NO	NO
SCIE	idustriai i anure:		110	NO	NO	140	110	110	110	110	NO
	Residential Exposure Limit	0.1									
SCTL Re	sidential Failure?		YES	NO	NO	NO	NO	NO	NO	NO	NO
	Leachability GW Low Yield I	80									
SCTL Leachabili	ty GW Low Yield Failure?		NO	NO	NO	NO	NO	NO	NO	NO	NO

NA Not analyzed

- B The analyte was detected in the associated method and/or calibration blank.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- UJ The analyte was below the reported sample quantitation limit. However, the reported value is approximate. mg/kg Milligrams per Kilogram
- 1 Ch 62-777 F.A.C Soil Cleanup Target Level (SCTLs) reported in mg/kg

SCTL 1 IND - Soil Cleanup Target Level

Shading with "YES" indicates Total BaP equivalent fallure.

TABLE 4
SPLP Data Summary
DRMO Land Slivers, NAS Key West

Location			S-SB-21	L	S-SS-1	18	S-SS-21	
Sample ID			JM31-FD02-062211	S-SB-21-0204	JM31-FD5-062211	S-SS-18-000_5	JM31-FD01-062211	S-SS-21-0_502
Sample Depth (ft)			2 - 4	2 - 4	0 - 0.5	0 - 0.5	0.5 - 2	0.5 - 2
Sample Date			6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011	6/22/2011
Analyte	Units	GCTL ¹						
PAH (UG/L)								
1-Methylnaphthalene	UG/L	28	0.14 U	0.14 U	NA	NA	NA	NA
2-Methylnaphthalene	UG/L	28	0.29 U	0.3 U	NA NA	NA NA	NA NA	NA NA
Acenaphthene	UG/L	20	0.14 U	0.14 U	NA NA	NA NA	NA NA	NA NA
Acenaphthylene	UG/L	210	0.14 U	0.14 U	NA NA	NA NA	NA NA	NA NA
Anthracene	UG/L	2100	0.051 U	0.052 U	NA NA	NA NA	NA NA	NA NA
Benzo(a)anthracene	UG/L	0.05	0.13 U	0.13 U	NA NA	NA NA	NA NA	NA NA
Benzo(a)pyrene	UG/L	0.03	0.14 U	0.14 U	NA NA	NA NA	NA NA	NA NA
Benzo(b)fluoranthene	UG/L	0.05	0.14 U	0.14 U	NA NA	NA NA	NA NA	NA NA
Benzo(g,h,i)perylene	UG/L	210	0.14 U	0.13 U	NA NA	NA NA	NA NA	NA NA
Benzo(k)fluoranthene	UG/L	0.5	0.31 U	0.32 U	NA NA	NA NA	NA NA	NA NA
Chrysene	UG/L	4.8	0.37 U	0.38 U	NA NA	NA NA	NA NA	NA NA
Dibenzo(a,h)anthracene	UG/L	0.005	0.15 U	0.16 U	NA NA	NA NA	NA NA	NA
Fluoranthene	UG/L	280	0.15 U	0.15 U	NA NA	NA	NA NA	NA
Fluorene	UG/L	280	0.081 U	0.083 U	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	UG/L	0.05	0.085 U	0.087 U	NA	NA	NA	NA
Naphthalene	UG/L	14	0.14 B	0.11 B	NA	NA	NA	NA
Phenanthrene	UG/L	210	0.16 U	0.17 U	NA	NA	NA	NA
Pyrene	UG/L	210	0.16 U	0.16 U	NA	NA	NA	NA
SW6020 (UG/L)								
Lead	UG/L	15	NA	NA	11.2 J	27.8 J	NA	NA
SW8082 (UG/L)								
Aroclor-1016	UG/L	0.5	NA	NA	NA	NA	1.5 U	1.5 U
Aroclor-1221	UG/L	0.5	NA	NA	NA	NA	1.8 U	1.8 U
Aroclor-1232	UG/L	0.5	NA	NA	NA	NA	0.86 U	0.85 U
Aroclor-1242	UG/L	0.5	NA	NA	NA	NA	1.3 U	1.3 U
Aroclor-1248	UG/L	0.5	NA	NA	NA	NA	0.56 U	0.55 U
Aroclor-1254	UG/L	0.5	NA	NA	NA	NA	0.52 U	0.51 U
Aroclor-1260	UG/L	0.5	NA	NA	NA	NA	3.2 J	1.5 J

NA Not analyzed

B The analyte was detected in the associated method and/or calibration blank.

J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.

U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.

ug/l Micrograms per Liter

Bold indicates the analyte was detected

Shading indicates the analyte exceded GCTL1

GCTL - Groundwater Cleanup Target Level

1 = Ch 62-777 FAC Groundwater Cleanup Target Levels (GCTLs) reported in $\mu g/L$

TABLE 5 Alternative 2: Excavation, Offsite Disposal and Backfill Removal Action Costs DRMO Land Slivers, NAS Key West

Site: **DRMO Slivers**

Location: NAS Key West, Key West, FL

Phase: EE/CA

Date: November 2011

Description: Alternative 2 includes the excavation of impacted surface soil to 2 feet bls to meet FDEP SCTLs for arsenic, lead, PAHs, and PCBs; backfill of the excavations to original grade with imported clean topsoil and restoration to the original condition. Confirmation samples will be collected along the road at both DRMO Slivers. Backfill material will consist of topsoil, which will be compacted by a track walking over 100 percent of the backfilled area with a track-type tractor or equivalent and restored to match the existing conditions. The total volume of soil to be excavated is approximately 97 CY from the North DRMO Sliver and 524 CY from the South DRMO Sliver.

CALCULATIONS		ASSUMPTIONS
Impacted Area (0.5 ft excavation)		1) Excavation
North Sliver (CY)	97	* Soil to be excavated = 97 CY from the North DRMO Sliver and 524 CY from the South DRMO Sliver
South Sliver (CY)	524	
Assumed soil weight (tons/CY)	1.35	·
In-Place Volume of soil to be excavated (CY)	621	* Soil weight assumed as 1.35 tons/CY (engineer's estimate)
Volume of soil to be excavated (tons)	838	· · · · · · · · · · · · · · · · · · ·
voiding of son to be excavated (tens)		2) Erosion and Sediment Controls
		* Perimeter controls around the perimeter are assumed
Total for disposal (tons)	838	
Total for aloposal (tolls)		3) Removal of Excavated Soil
		4) Confirmation Sampling
		* Samples will be collected along the road at both slivers for horizontal delineation
		5) Fill Material
		* Backfill material will come from an offsite borrow source
		* Complete backfill of material removed, restoring original grade
		* Top soil will be used for the top 6 inches
		* Additional % of excavated material to allow for compaction
		Additional 70 of Oxfordion material to allow for compaction
		6) Disposal Characterization
		* Actual frequency of disposal characterization samples will be based on facility
		* price per sample for TCLP

TABLE 5Alternative 2: Excavation, Offsite Disposal and Backfill Removal Action Costs *DRMO Land Slivers, NAS Key West*

Qty	Unit	Unit Cost	Total Cost	Notes
1	LUMP	\$59,241.67	\$59,242 Engineer's Estimate \$59,242	
1	LUMP	\$99,487.04	\$99,487 Engineer's Estimate \$99,487	
1	LUMP	\$27,160.00	\$27,160 Engineer's Estimate \$27,160	
0	TON	\$10.00	\$0 \$0	
0	TON	\$10.00	\$0 \$0	
0 0	UNIT UNIT		\$0 Engineer's Estimate \$0 Engineer's Estimate \$0	
1	LUMP	\$17,162.54	\$17,163 Engineer's Estimate \$17,163	
1	LUMP	\$28,940.37	\$28,940 Engineer's Estimate \$28,940	
			\$231,992	
15%			\$34,799 Engineer's Estimate \$266,790	
			\$266,790	
			\$0	
	1 1 0 0 0 1 1	1 LUMP 1 LUMP 0 TON 0 TON UNIT 1 LUMP 1 LUMP	1 LUMP \$59,241.67 1 LUMP \$99,487.04 1 LUMP \$27,160.00 0 TON \$10.00 0 TON \$10.00 0 UNIT \$125.00 0 UNIT \$250.00 1 LUMP \$17,162.54 1 LUMP \$28,940.37	1 LUMP \$59,241.67 \$59,242 Engineer's Estimate \$59,242 1 LUMP \$99,487.04 \$99,487 Engineer's Estimate \$99,487 1 LUMP \$27,160.00 \$27,160 Engineer's Estimate \$27,160 0 TON \$10.00 \$0 \$0 0 UNIT \$125.00 \$0 Engineer's Estimate \$0 UNIT \$250.00 \$0 Engineer's Estimate \$0 UNIT \$250.00 \$0 Engineer's Estimate \$17,163 Engineer's Estimate \$17,163 Engineer's Estimate \$17,163 Engineer's Estimate \$28,940 \$231,992 15% \$28,940.37 \$28,940 Engineer's Estimate \$231,992 Engineer's Estimate \$266,790 Engineer's Estimate \$266,790

TABLE 5 Alternative 2: Excavation, Offsite Disposal and Backfill Removal Action Costs DRMO Land Slivers, NAS Key West

PRESENT V	'ALUE ANALYSIS Year	S Total Cost	Total Cost Per Year	Discount Factor (1.4%)	i = t = Present Value	0.014 2	2011 Discount Rates for OMB Circular No. A-94, Published February 3, 2011.
Capital O&M	0 N/A SENT VALUE OF	\$266,790 \$0	\$266,790 \$0	1.000 1.96	\$266,790 \$0 \$266,790 \$266,800		*Discount factor established per "Revisions to OMB Circular A-94 on Guidelines and Discount Rates for Benefit-Cost Analysis", OSWER Directive No. 9355.3-20, June 25, 1993.

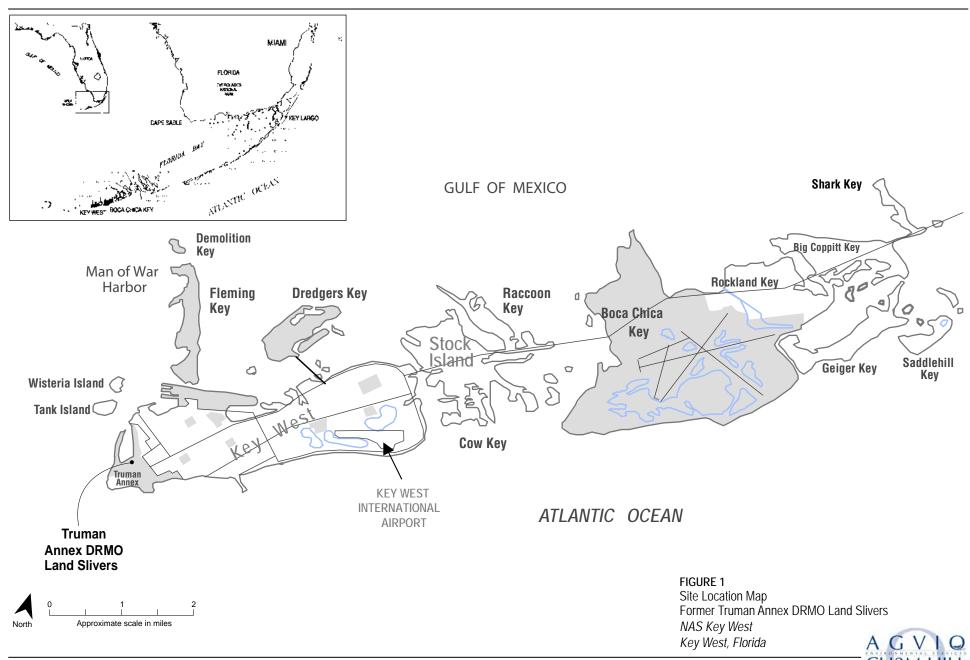
The costs estimates are provided to an accuracy of +50 percent and -30 percent.

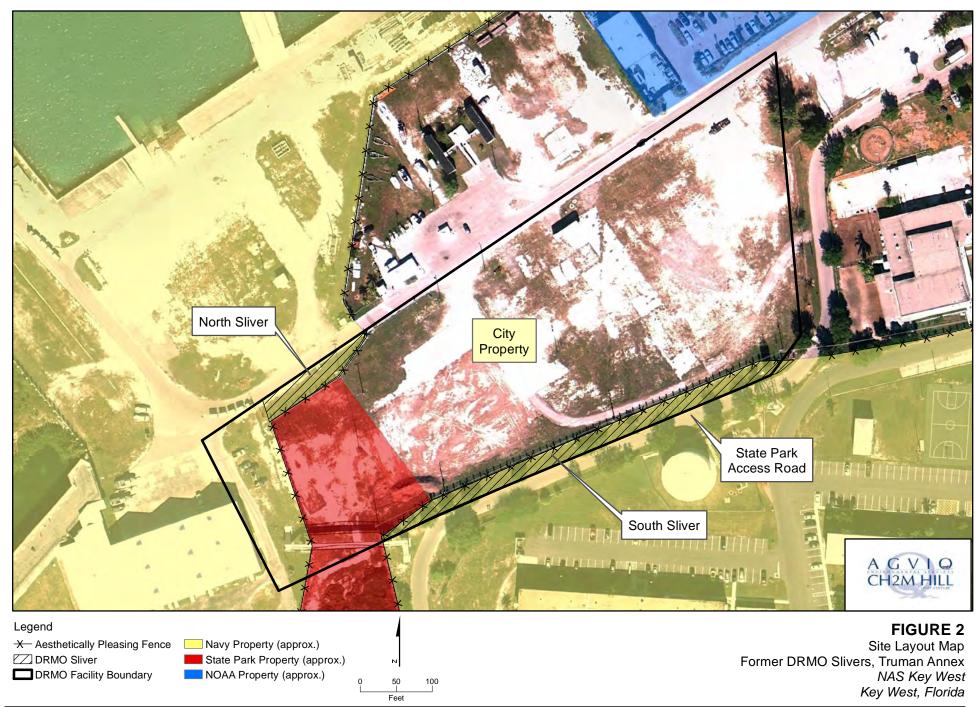
LF = linear foot

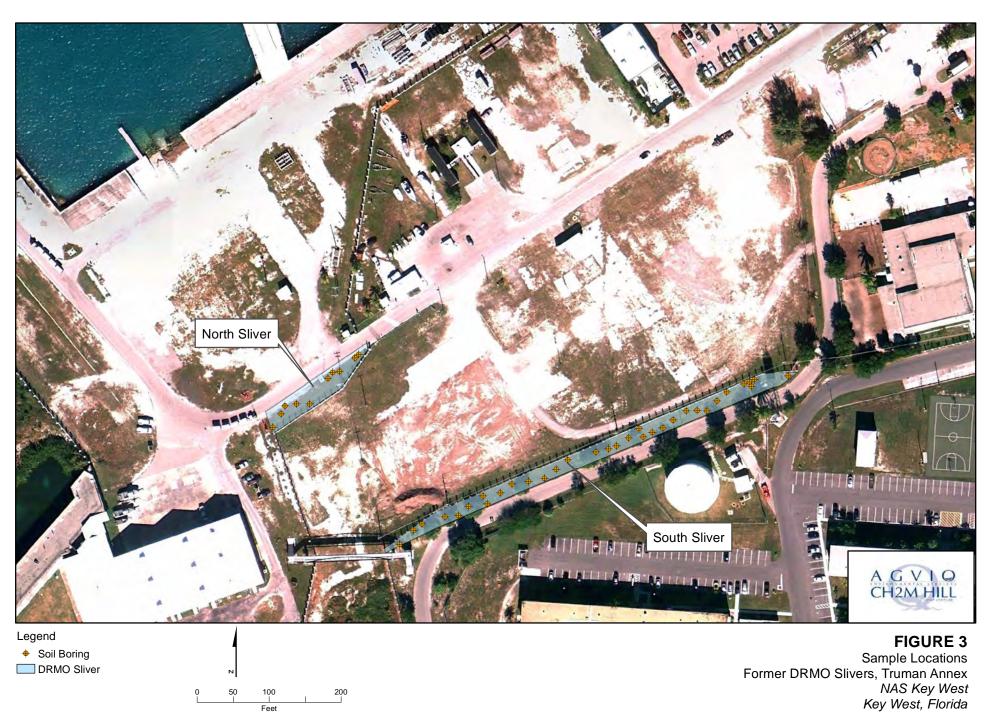
CY = cubic yard CF = cubic feet mobe/demobe = mobilization/demobilization

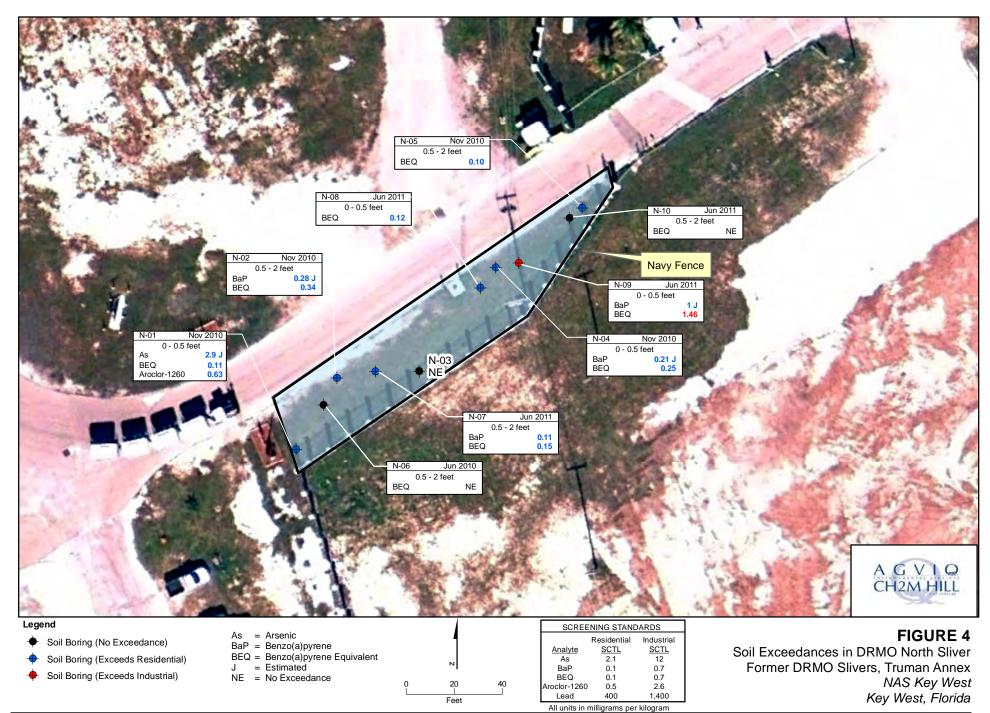
ft = foot, feet sq ft = square feet

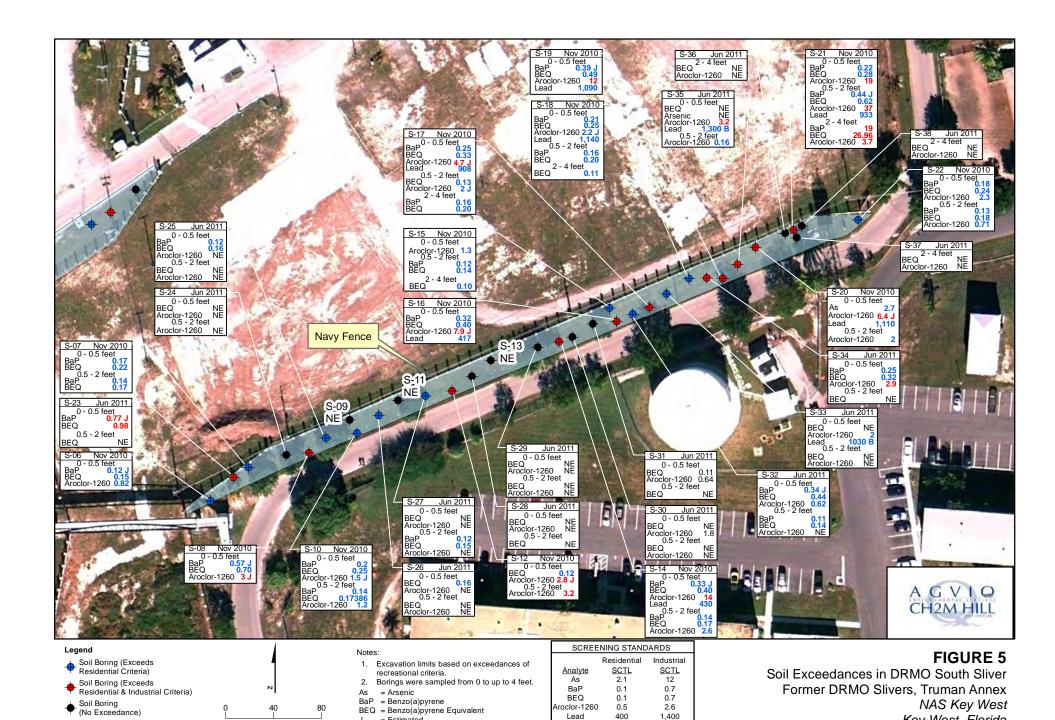
Figures











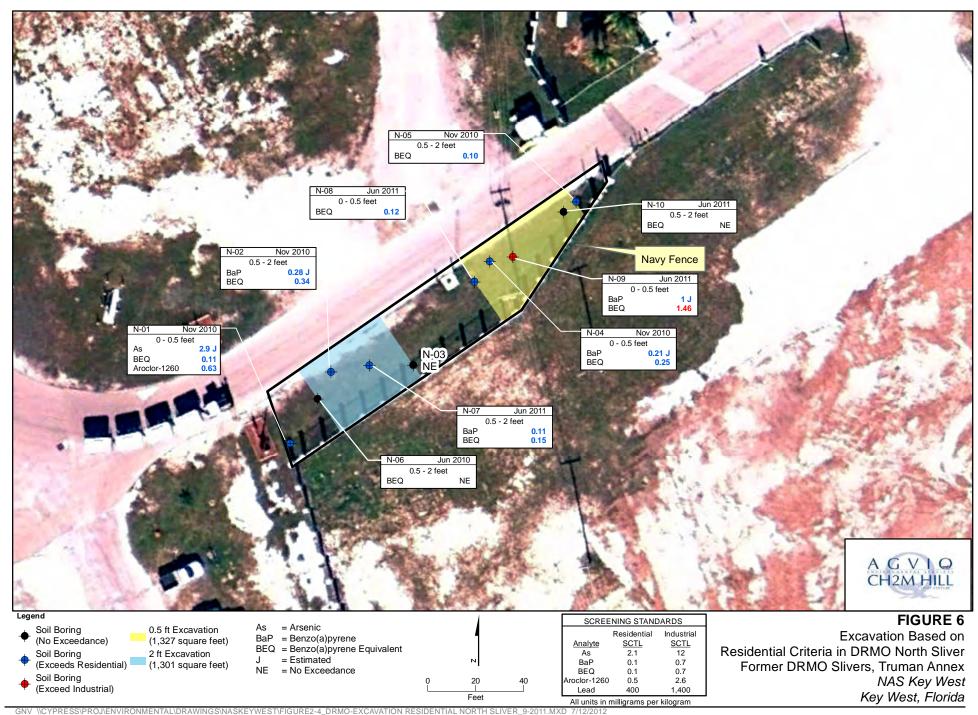
All units in milligrams per kilogram

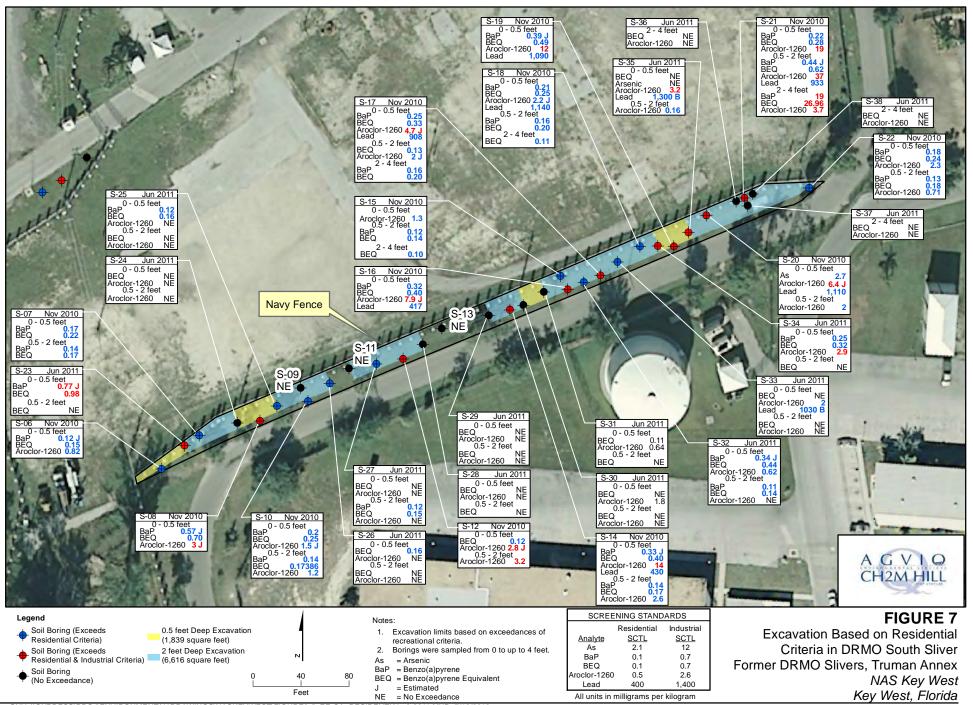
Key West, Florida

Feet

= Estimated

= No Exceedance







ATTACHMENT A

Applicable or Relevant and Appropriate Requirements

TABLE A-1Chemical-Specific Applicable or Relevant and Appropriate Requirements (ARARs) *DRMO Land Slivers, NAS Key West, Florida*

Standard, Requirement, Criterion, or Limitation	ARAR Status	Description	Comment
Florida Contaminant Cleanup target Levels (CTLs) Rule	Applicable	This rule provides default cleanup criteria for soils and process for deriving site-specific CTLs for soils.	Florida's cleanup level for lead in soil is 400 mg/kg and based on a residential direct
Chapter 62-777.170(2)(a) FAC			exposure scenario. The site-wide average concentration should be below the SCTL identified.
			Cleanup level for arsenic in soil is 2.1 mg/kg and based on a residential direct exposure scenario.
			Cleanup levels for PAHs in surface soil are based on the BEQ value of individual PAHs. The BEQ cleanup level is 0.1 mg/kg and is based on a residential direct exposure scenario.
			Cleanup level for PCBs in soil is 0.5 mg/kg and is based on a residential direct exposure scenario.

ARAR BEQ CTL DRMO FAC	Applicable or Relevant and Appropriate Requirement benzo(a)pyrene equivalent Cleanup Target Level (FDEP) Defense Reutilization and Marketing Office Florida Administrative Code	mg/kg PAH PCB	milligrams per kilogram polycyclic aromatic hydrocarbon polychlorinated biphenyl
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ARARS A-1

TABLE A-2 Location-Specific Applicable or Relevant and Appropriate Requirements (ARARs) DRMO Land Slivers, NAS Key West, Florida

Location	Regulatory Citation	ARAR Status	Description	Comments
Cultural Resources				
Presence of Archaeological Resources	Protection of Archaeological Resources, 43 CFR 7.4(a) and 43 CFR 7.5(b)(1)	Potentially applicable ARAR	The regulation prohibits excavation, removal, damage, or otherwise alteration or defacement of declared archaeological resources unless by permit or exception. Establishes protection of any such archaeological resources if discovered.	Applicable only if activities uncover archaeological resources. No known archaeological features exist at this site. If buried historic or prehistoric remains are discovered during construction, mitigation measures to protect the area would be required if such a discovery were uncovered.
Floodplains				
Within Floodplain	Executive Order 11988, Floodplain Management 44 CFR 9, Floodplain Management and Protection of Wetlands	Potentially applicable	Action that will occur in a floodplain and relatively flat areas adjoining inland and coastal waters and other flood-prone areas must avoid, to the extent possible, the long- and short-term adverse effects associated with occupancy and modification of floodplains.	Measures taken to mitigate adverse effects include erosion and sediment controls.

ARAR Applicable or Relevant and Appropriate Requirement Code of Federal Regulations

CFR

ARARS A-2

TABLE A-3Action-Specific Applicable or Relevant and Appropriate Requirements (ARARs) *DRMO Land Slivers, NAS Key West, Florida*

Action	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description	Comment				
Site Preparation,	Site Preparation, Construction, Remediation and Excavation Activities							
Activities Causing Air Emissions	Stationary Sources: Emissions Standards 62-296.320(4)(c) FAC	Applicable	Unconfined emissions of dust are not allowed, including dust from construction activity.	Dust must be controlled during excavation of debris.				
South Florida Water Management District Rules for Incidental [Construction] Site Activities	Rule 40E-40.302, FAC.	Relevant and Appropriate	Relevant and appropriate to any land clearing, excavation, or similar construction activity in the South Florida Water Management District where landclearing activities are not within 50 feet of, and excavation activities are not within 200 feet of wetlands or other waters of the state. Requires that reasonable assurances that the conditions specified in Rule 40E-40.302, FAC, have been met.	The landclearing activities are not within 50 feet, and excavation activities are not within 200 feet of waters of the state. Appropriate erosion and sediment controls will be implemented to prevent the discharge of soil/sediment to waters of the state and assure compliance with the conditions specified in Rule 40E-40.302, FAC.				
Activities Causing Stormwater Runoff	Florida Regulations for Stormwater Discharges 62-25.025(7) FAC	Relevant and Appropriate	Activities that will disturb more than one acre. Requires preventing the discharge of pollutants in stormwater from these activities to waters of the state through the use of best management practices. The NPDES general permit also covers water discharged due to dewatering activities.	The proposed work will disturb less than one acre of land. However, appropriate best management practices for erosion and sediment control will be implemented to prevent the discharge of soil/sediment to waters of the state.				

ARARS A-3

TABLE A-3 Action-Specific Applicable or Relevant and Appropriate Requirements (ARARs) *DRMO Land Slivers, NAS Key West, Florida*

Action	Standard, Requirement, Criterion, or Limitation	ARAR Status	Description	Comment
Waste Managem	ent			
Hazardous Waste Determination	40 CFR 262.11 adopted by reference in 62-730.160	Applicable	Require anyone who generates a solid waste (including environmental media that may contain a solid waste) to determine if that waste is a hazardous waste, in accordance with 40 CFR 261.	
PCB Remediation Waste	40 CFR 761.3	Potentially Applicable	Soils that contain ≥50 ppm PCBs, at as-found concentrations must be managed as PCB remediation waste.	Note: to date only soils less than 50 ppm PCBs has been detected
Container Handling Prior to Transport	Standards Applicable to Generators of Hazardous Waste 40 CFR 262.30 through .33, as referenced in 62-730 FAC	Potentially Applicable	Prior to transportation, containers would be packaged, labeled, marked, and placarded in accordance with RCRA and Department of Transportation requirements if testing determined remediation soils were hazardous.	Note: Soil samples tested in previous investigations did not exhibit a hazardous waste characteristic, as determined using TCLP.

ARAR status depends on the specific remedial alternatives evaluated.
ARAR applicable or relevant and appropriate requirement
CFR Code of Federal Regulations
FAC Florida Administrative Code
NPDES National Pollutant Discharge Elimination System
PCB polychlorinated biphenyl

parts per million

ppm RCRA TCLP Resource Conservation and Recovery Act toxicity characteristic leaching procedure

ARARS

ATTACHMENT B

Public Comments



P.O. Box 14463 • Tallahassee, FL 32317-4463 tel: 850-877-8097 • fax: 850-942-5264 website: http://www.peer.org • e-mail: flpeer@peer.org

May 18, 2012

Mr. Dana Hayworth Attn: Amy Twitty 1766 Sea Lark Lane Navarre, Florida 32566 Via Email: <u>Dana.Hayworth@navy.mil</u> <u>Amy.Twitty@ch2m.com</u>

Via Facsimile: (850) 939-0035

Re:Engineering Evaluation/Cost Analysis for Former DRMO Land Slivers Naval Air Station Key West

Dear Mr. Hayworth;

In response to the May 4, 2012 public notice regarding soil remediation for lead, arsenic PAHs etc. we have the following questions.

- 1. Section 2.2, Previous Investigations, notes that soil was excavated within the land sliver in 1999. Inasmuch as this area is listed in the National Registry of Historic Sites, has coordination with the State's Historic Preservation Office and approval letters been obtained for each aspect of this site cleanup? How may we obtain copies?
- 2. It appears that numerous soil excavations have taken place in and around the DRMO area as a result of the Base Realignment and Closure activities. In this instance, the Navy is proposing an EE/CA type removal only for these land slivers; however, Section 2.2 notes that 12,000 cubic yards of contaminated soil was excavated from January 11 to April 16. 1999 that included both land slivers. If soil was already removed from this area, why is more soil being removed, what is the correlation between this removal and past removals and the CERCLA cleanup methods?

Section 2.3.4, Potential Migratory Pathways notes that "no groundwater contamination was identified that was associated with the DRMO operations" and that SPLP sampling data supports the same conclusion. What is the depth to groundwater in this area?

Section 2.3.5, Potential Receptors, mentions an 8-inch water main running the length of this area on the south land sliver. If it does, we have the following questions:

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Mr. Dana Hayworth and Ms. Amy Twitty Re: Engineering Evaluation/Cost Analysis for Former DRMO Land Slivers Naval Air Station Key West May 18, 2012

- a. When was this line installed in relationship to the 1999 excavation and the current planned excavation?
- b. What is the impact from the contamination to the line and how was this determined?
- c. What area and number of people does this line provide potable water?
- d. How can we obtain water quality data from the date the line was installed to present?
- e. What approvals were obtained from the Navy?
- f. Who installed the line and is there construction details and other documentation?
- g. What pre- and post-soil and groundwater sampling was conducted during line installation and where can we obtained the result?
- h. How is the water line being managed with respect to insuring public health and safety?
- i. Are tap-water samples being taken now that are representative of the type of contamination that is being excavated?
- j. Have any reported leaks, damage or repairs occurred since the line was installed?
- k. Are there reports or other information that would support how this line has been maintained and where can these be obtained?

Any assistance that you can provide with respect to the above questions would be most appreciated.

Sincerely,

Jerry Phillips

Director, Florida PEER



July 11, 2012

Mr. Jerry Phillips Director, *Florida* PEER P.O. Box 14463 Tallahassee, FL 32317-4463

Subject: Response to Comments - Engineering Evaluation/Cost Analysis for the

Non-Time Critical Removal Actions for the former Defense Reutilization

Marketing Office (DRMO) Land Slivers

Naval Air Station (NAS) Key West - Key West, Florida

Dear Mr. Phillips:

On behalf of the Naval Facilities Engineering Command, Southeast (NAVFAC SE), AGVIQ-CH2M HILL Constructors, Inc. Joint Venture (AGVIQ-CH2M HILL) is pleased to submit this Response to Comments - Engineering Evaluation/Cost Analysis for the Non-Time Critical Removal Actions for the former DRMO Land Slivers at NAS Key West in Key West, Florida. This Response to Comments has been prepared in response to *Florida* PEER's inquiry dated 18 May 2012.

Please call me at (850) 232-0320 or e-mail me at Amy.Twitty@ch2m.com or the NAVFAC SE Remedial Project Manager, Mr. Brian Syme, at (904) 542-6151 or Brian.Syme1@navy.mil if you have any questions or comments regarding the enclosed information.

Sincerely,

AGVIQ-CH2M HILL Constructors, Inc. Joint Venture

Amy Twitty, P.G. Senior Project Manager

cc: Mr. Brian Syme, NAVFAC SE

Mr. Dana Hayworth, NAVFAC SE Ms. Sarah Reed, NAVFAC SE Response to Florida PEER questions:

Question 1: "Has coordination with the State's Historic Preservation Office and approval letters been obtained for each aspect of this site cleanup and how may we obtain copies."

Answer: As part of the Navy's CERCLA-based site activities, we will be coordinating with the Florida Historic Preservation Office through a letter submittal prior to beginning the field activity associated with the Engineering Evaluation/Cost Analysis. All such correspondence will be made part of the Administrative Record (AR) and will be available for review in the Information Repository located at the main library in Key West, Florida.

Question 2: "It appears that numerous soil excavations have taken place in and around the DRMO area as a result of the Base Realignment and Closure activities. In this instance, the Navy is proposing an EE/CA type removal only for these land slivers; however, Section 2.2 notes that 12,000 cubic yards of contaminated soil was excavated from January 11 to April 16 in 1999 that included both land slivers. If soil was already removed from this area, why is more soil being removed, what is the correlation between this removal and past removals and the CERCLA cleanup methods?"

Answer: Please refer to Section 2.1 Site Description and Background where the first, second and third paragraph provides an explanation to previous excavations conducted under the BRAC program. The land slivers were not included in further BRAC investigations once the true boundaries of the Navy property to the BRAC land were identified upon deed transfer of the land to the City of Key West in 2002. In the summer of 2010, soil samples were collected and tested along each land sliver as part of the continued investigation of contamination along these areas, under the Defense Environmental Restoration Program. Also, as noted in Section 2.1 second paragraph in the EE/CA, it was not realized until 2010 when the land slivers were sampled, that PCB contaminated backfill was placed on the land slivers from BRAC activities in 1999.

Question 3: Section 2.3.4, Potential Migratory Pathways "notes that no groundwater contamination was identified that was associated with the DRMO operations" and that SPLP sampling data supports the same conclusion. What is the depth to groundwater in this area?"

Answer: Depth to groundwater in this area is between 3 to 4 feet below land surface (bls) which was recorded during the field event on November 17, 2010. During this field event the Navy completed soil borings in the slivers and collected soil vertically until groundwater was encountered which was between 3 to 5 feet bls.

Question regarding Section 2.3.5 Potential Receptors and the 8-inch water main:

- a. "When was the line installed in relationship to the 1999 excavation and the current planned excavation?" Answer: The water line was installed in 2003.
- b. "What is the impact from contamination to the line and how was this determined?" Answer: There is no known impact to the water line from the contaminated soils. During the recent soil investigations at the site, at least 17 soil samples were collected from 2 to 4 feet bls in the vicinity of the pipeline (the pipeline is reportedly at 4 feet bls). No contamination was detected in 16 of the 17 samples analyzed at this depth. Boring SB-21,

- which was not located along the pipeline, is the only boring that contained levels of COCs above the action levels from 2 to 4 feet bls. This area is scheduled to be removed.
- c. "What area and number of people does this line provide potable water?" Answer: The water line supplies potable water to; the State Park with an annual consumption of 230,000 gallons in Fiscal Year 2011 (), the Park Manager residence located at the State Park, the Navy special warfare building (795) has an average of 50 occupants during each training cycle, the Navy Port Operations building (284) with approximately 20 occupants, ships berthed at the Navy's Port facility (Mole Pier & Pier 8) and on occasion water has been supplied to cruise ships berthed at the Mole Pier by the FKAA.
- d. "How can we obtain water quality data from the date of the line was installed to present?" Answer: Although we have no reason to believe that the water line in question has been compromised or water quality otherwise affected by the soil contamination to be addressed, the Florida Keys Aqueduct Authority (FKAA) undertakes and controls all water quality sampling and reporting and all available reports would need to be obtainable from that agency.
- e. "What approvals were obtained by the Navy?" Answer: No outside approvals were required at the time the water line was installed as the Navy owned both the water system to which the line was added and land on which it was installed. In 2008 the Navy entered into a Privatization Contract with the FKAA. At that time the potable water system at NAS Key West, including the subject water line, became the property of the FKAA.
- f. "Who installed the line and is there construction details and other documentation?"

 Answer: The line was installed by the Navy as a modification to a Navy contract to construct an above ground water storage tank in the Truman Annex area. The Navy still possesses the original design layout drawings for the line.
- g. "What pre-and post soil and groundwater sampling was conducted during the line installation and where can we obtain the results?" Answer: The Navy did not conduct pre or post soil or groundwater sampling associated with the installation of the water line.
- h. "How is the water line being managed with respect to ensuring public health and safety?" Answer: Again, although we have no reason to believe that line integrity has been compromised or water quality affected by the soil contamination to be addressed, FKAA has both the authority and responsibility to properly maintain this line and ensuring the provision of safe potable water meeting all state and federal standards.
- i. "Are Tap-water samples being taken now that represent the type of contamination that is be excavated?" Answer: Questions regarding current water quality sampling should be directed to FKAA.
- j. "Have any reported leaks, damage or repairs occurred since the line was installed?" Answer: The Navy is not aware of any reported leaks, damage, or repairs by FKAA, who solely maintains the water line.
- k. "Are there reports or other information that would support how this line has been maintained and where can these be obtained?" Answer: Questions regarding current maintenance measures should be directed to FKAA. General information including system water quality testing can be found on their website at http://www.fkaa.com.

ATTACHMENT C

FDEP Approval Letter



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Rick Scott Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr. Secretary

August 6, 2012

Attn: Mr. Brian Syme
DEPARTMENT OF THE NAVY
NAVAL FACILITIES SOUTHEAST
AJAX STREET, BLDG 135N
P.O. BOX 30A
JACKSONVILLE, FL 32212-0030
Official Government Business

Re: Action Memorandum Defense Reutilization Marketing Office Land Slivers Truman Annex Revision 01, Naval Air Station Key West, Key West, Florida

Dear Mr. Syme,

The Department has completed the technical review of the subject document dated July 2012 (received July 25, 2012) and find the document to be adequate for its intent and approved. If I can be of any further assistance with this matter, please contact me at (850) 245-8998.

Sincerely,

Tracie Lynn Bolanos

Remedial Project Manager Federal Programs Section

Bureau of Waste Cleanup

KAWAW

cc: Mr. Robert Courtright, Naval Air Station Key West, Key West, Florida Ms. Amy Twitty, AGVIQ-CH2M Hill, Navarre Beach, Florida

Tracie J. Balanos